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The American Artisan
AND HARDWARE RECORD

Vol 57. No. 21. CHICAGO, MAY 22, 1909. $2.00 Per Year.

TURN BUCKLES

A full line of Bolts, Bolt Ends, Rivets, Lag Screws, Nuts, Washers and Carriage Hardware.

COLUMBUS BOLT WORKS,
COLUMBUS, OHIO.

GET THE LIVE LINE
"AMERICAN SEAL"

Elastic Oil Roofing Cement,
Stove Putty and Asbestos
Furnace Cement

For Furnaces, Stoves, Ranges and Roofs.
Jobbers write to-day for prices

THE
Wm. Connors Paint Mfg. Co.
Makers TROY, N. Y.

Western Agents: Friedly-Voehardt Co., 194 Mather St., Chicago, Ill.

Southwestern Agents: Stockhoff Supply Co., 107 N. Main St., St. Louis, Mo.

Iwans' Volcano Revolving Chimney Top

Sizes 6 to 12 inches. Sold by jobbers of Hardware and Tinners' Supplies.

Notice one of its **Strong Features.** The upward sloping opening in back of hood creates a constant upward draft, no matter how depressing the atmosphere.

You need it for some of your customers' chimneys.

Send postal for catalogue.

IWAN BROTHERS
Mfrs. of Hardware Specialties
SOUTH BEND, IND.

"To discontinue an advertisement," says Ex-postmaster-General John Wanamaker, one of the largest advertisers in the world,—and, naturally enough, one of the most successful business men,—"is like taking down your sign. If you want to do business you must let the people know it. I would as soon think of doing business without clerks as without advertising."

"NEVER-BREAK"
TRADE MARK

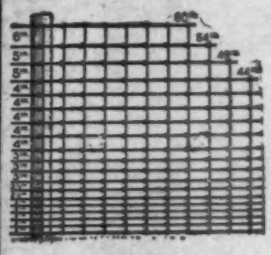
Catalog Free

"NEVER-BREAK"

STEEL SPIDERS, GRIDDLES AND KETTLES

WILL NOT Scale Off like cheap enamel.
WILL NOT Scorch or Burn like light fry pans and skillets.
WILL NOT Absorb Grease or Flavors like cast iron.

THE AVERY STAMPING CO.
CLEVELAND, OHIO
Sole Manufacturers
"NEVER-BREAK" Goods

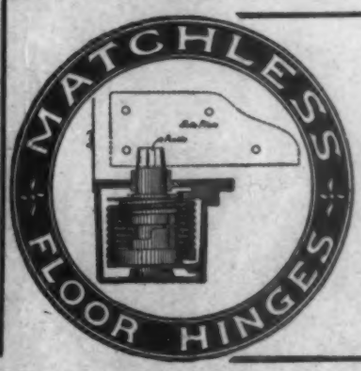


The Denning Fence

¶ Is the Fence that pleases your customer. It is made on scientific and practical principles. It is made in various sizes, weights and meshes, for stock, hogs, poultry and rabbits.

Write for catalog and prices on Lawn and Cemetery Fencing, Gates, Barb Wire, Nails, Staples, Portable Corn Cribs and Grain Bins.

The Denning Wire & Fence Co., Cedar Rapids, Iowa.



MATCHLESS

Spring and Pivot Hinges, Floor Hinges, Jamb Hinges and Hardware Specialties

☞ The Matchless Jamb Hinge is well made of either steel, brass or bronze metal, single and double acting, in all sizes and finishes—for light and heavy doors. Our goods are all of the highest quality. If your jobber cannot furnish them, write us.

LAWSON MFG. COMPANY
40 Dearborn Street, CHICAGO, ILL.

The Stove That Multiplies the Power of the Gas

GOOD LUCK GAS STOVE

In addition to its wonderful heating power, due to its great radiating surface

This Stove is also a Powerful Air Circulator

No. 17—Will circulate 3000 cubic feet of air per hour.
No. 18— " " 4000 " " " "

The Fire Tile Back Wall

This stove is fitted with a special fire Tile back wall.

The front or fire surface of this back wall is covered with wedge shaped radiating pins of same material, increasing surface of this face 100 per cent.

The rear surface of this back wall is also prime radiating surface.

The Cast Flame Trellis

This appliance fills the entire fire place opening of the Stove. It is sectional and lifts out.

The radiating surface of the Flame Trellis is equal to the rear surface of the Tile Back Wall.

Note These Figures

Area of front of Tile Back Wall equals 2 Asbestos Backs.
" " back " " " " 1 " Back
" " Flame Trellis " " " 1 " "

Total Area of Fire Box Equals 4 Asbestos Backs

	SIZE OF BODY			HEARTH		List on Stove	For Set'ns
	Height	Width	Depth	Width	Depth	Nat'l Gas Only	Add to List
17	21½in.	14½in.	5½ in.	21½ in.	5 in.	$7.25	$ .60
18	24 "	18½ "	5½ "	24 "	5½ "	9.50	.60

They Don't Cost You Much.

STOVE & RANGE CO. of Pittsburgh, GOOD VALUES IN STOVES Pittsburgh, Pa.

Superior Furnaces
Imperial Boilers

"The Coal Savers"

The Line for every ambitious heating contractor to handle for 1909 and 1910 and every other year.

Prompt shipments at all times from either Utica or Chicago Stocks.

Utica Heater Company
Utica, N. Y.

Chicago Branch, 105 Lake St., Chicago, Ill.

FIRE POT—Large and deep. Ash-pit door at side of stove.

GRATES—of the famous Monitor Duplex type.

MAGAZINE—Extra large.

ASH-PIT DOOR—Has large air tight sliding draft register.

ILLUMINATED DOORS—All doors are mica illuminated, absolutely air-tight.

ASH PIT—Extra large, fitted with large bailed ash pans.

CLEAN OUT—Located on each side of stove for convenience.

NICKEL PARTS—All silver nickeled and placed where they will not tarnish.

THE MONITOR

FIVE FRONT FLUE

RADIATOR

1683

Square Inches MORE Radiating SURFACE than any other stove made.

10

Exclusive SELLING POINTS. The only Stove of its kind made.

In the construction of this stove there is a very decided departure from the accepted principle of construction of the ordinary Base-burner. It is a well known fact that radiated heat can be more generously and reliably distributed to all parts of the room, from the **front** part of the stove than from any other situation. In order that the hottest part of the heat elements would be forced to the front of the stove we have provided the **MONITOR** with five large separate flues which occupy the entire lower front of the stove. Thus the front part of the stove is always the hottest and heat is radiated into the center of the room direct. This principle of construction gives the **MONITOR** just 1683 square inches more of radiating surface than any other stove made.

The **MONITOR RADIATOR** is a handsome stove, a serviceable stove, and an extraordinary and economical heater.

We want one dealer in each town. Write for complete descriptive matter today.

The Monitor Stove and Range Co. Manufacturers

CINCINNATI, OHIO.

Distributors—For the State of Michigan: MORLEY BROS., Saginaw, Michigan; For the State of Minnesota and Northwest: THE GREAT WESTERN STOVE AND REPAIR CO., Minneapolis, Minn; For the State of Wisconsin: MORLEY MURPHY HARDWARE CO., Green Bay, Wisconsin; For the State of Nebraska, Wyoming, Western Iowa and the Black Hills PAXTON & GALLAGHER CO., Omaha, Nebraska.

VAN'S

Patent Improved Wrought Steel Portable

RANGE

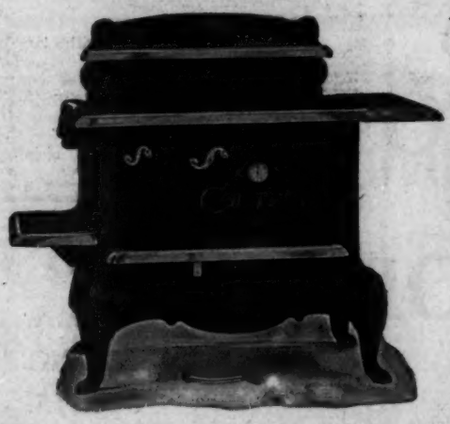
For Hotels, Restaurants, Public Institutions, Boarding Houses and Private Families. All kinds of Hotel Implements for culinary purposes. Manufactured and for sale by

The

JOHN VAN RANGE CO.

Southwest Corner
5th and Broadway

CINCINNATI, - - OHIO



The Greatest Coke Burning Stove the World Ever Saw

CONTROL

IT WILL BURN COAL AS WELL

Send for Booklet for full particulars

Albany Foundry Company, Albany, N. Y.

BANNER QUALITY

This is a range of unquestioned merit and individuality.

It is handsomely designed, made of the best materials, free from defects of any nature and carefully and honestly constructed—in fact a first-class range in all respects.

It will sell because it is just what your customers want, a range that can be depended upon at all times, a range that sells at a price which is right and a range that cooks and bakes to perfection.

Mr. Dealer—You should handle it, there's money in it for you. Write for further particulars.

Quality Stove & Range Co., Belleville, Ill.

Munsell's Mica

EUGENE MUNSELL & CO.
NEW YORK AND CHICAGO

THE STANDARD FOR HIGH GRADE STOVES

GAS RANGES
COOKERS

Get Catalog 21. Just out.

ODIN

HOT PLATES
HEATERS

ODIN STOVE MFG. CO.
ERIE, PENNA.

No.80.
SEND FOR CATALOGUE 14 AND DISCOUNT SHEET.

"DETROIT" OVEN
A Perfect Success.

SPECIAL FEATURES

Attractive and **handsome** design. V-shaped deflector conducts heat direct from burner into the oven. Large flues to equalize the heat in oven. Results: **Quick baking on top and bottom** alike.

DURABLE AND FUEL SAVER

The Price and Quality will Interest you.

The above cut shows the construction of our "Detroit" Oven.

Manufactured by . . . **The Detroit Vapor Stove Co., Detroit, Mich.**

The Champion Interchangeable Gas Range

2 IN 1

The Range that does double the work of any other Gas or Coal Range

You can COOK, BAKE, ROAST and BROIL with Gas, Coal or Wood without *removing a burner*

More Economical than a Gas Range

Has six 8-inch cooking holes with reducing lids, two summer grates; oven, 18½ x 20½ x 14. Broiler 18½ x 20½ x 14. Warming closet of CHAMPION STYLE, body of polished steel, full asbestos lined. Made with the usual CHAMPION CARE.

A RANGE OF QUALITY, DURABILITY and ECONOMY

Write for Catalogue and Discounts

The Champion Steel Range Company
CLEVELAND, OHIO

Perfect Light for the Country Home

DETROIT Combination Gas Machine

Here is a lighting system that not only means good profits for you but it will give the most satisfactory service to your customers.

The best light for residences, schools, churches, factories, etc., especially where city gas or electricity are not obtainable.

This system of lighting is cheaper than any other form of light and gives perfect results. A gas plant complete in itself right in the house. Perfectly safe, as fuel is stored outside of the house—endorsed by the National Board of Fire Underwriters. The gas is in all respects equal to city coal gas, and is ready for use at any time without generating, for illuminating or cooking purposes. The standard for over 40 years. Over 15,000 in successful operation.

The days of kerosene lamps are over. Why not sell this light in your community? Write for information, prices, and 72-page book "Lighting for Evening Hours."

Detroit Heating & Lighting Co., 806 Wight St. Detroit, Mich.

HERE'S A SNAP FOR WIDE-AWAKE RANGE DEALERS

I am going to sell 1000 400-lb. six-hole steel ranges finished in Japan for not over

$15.00 Each

I'll sell the ranges too, so you'd better get in line and order now. These Ranges formerly retailed at $60.00 each. Send me a carload order and get my best cash discount, or I'll give dating to firms with satisfactory credit. What better proposition can you ask for, if you have a little capital, are sufficiently enterprising, and want to make money? Do You Know there is a big demand for the "Willard" Steel Ranges because they give perfect satisfaction, and don't cost too much? Then why don't you supply them?

WILLARD STEEL RANGES

are advertised in many leading publications, and the people know them and want them. Get my prices—It means profit DOLLARS—to you. Every sale leads to another. I can sell you a better range than you can buy ANYWHERE for the money, one that cooks well and bakes evenly and perfectly, and will last a lifetime, with proper care. Tell me how many ranges you can sell annually and I will make you a very interesting proposition. Agents Wanted.

WM. G. WILLARD, No. 119 Willard Bldg., 520 Chestnut St., St. Louis, Mo.

Faultless Malleable Ranges have the **FIVE ESSENTIALS:** Design, Finish, Materials, Workmanship and Durability. Write for new catalog, "Range Reasons."

Faultless Malleable Stove Works, St. Charles, Ill.

Every Retailer

should secure a copy of

THE AMERICAN ARTISAN ADVERTISING MANUAL

Experts agree that it is a book of inestimable value to those who wish to prepare advertisements that will bring results.

Read their opinions as given below:

From "DOMESTIC ENGINEERING," Chicago

"The book is of undoubted worth as an aid to the retail merchant in preparing that desirable but illusive style of advertising copy known as "printed persuasion."

From "NATIONAL HARNESS REVIEW," Chicago.

"Its pages teem with salient points concerning texts, typographical displays and other essentials which go into the make-up of a business getting announcement."

From "PRESTO," Chicago.

"It would be impossible to estimate the value of the book to hardware merchants."

From "TRADE," Detroit, Mich.

"This book is thoroughly practical."

From "THE BUFFALO EXPRESS," Buffalo, N. Y.

"It contains many reproductions of successful advertisements."

From "THE WEEKLY IMPLEMENT TRADE JOURNAL," Kansas City, Mo.

"It is a reproduction of the retailers advertisements and criticisms of same."

From "FARM IMPLEMENT NEWS," Chicago.

"It is a compilation of all kinds of display advertisements as they actually appeared in different newspapers."

From "THE HOUSE FURNISHING REVIEW," New York.

"This book is useful to the ad man."

From F. R. SWITZER CO., "SUCCESSFUL ADVERTISING," Utica, N. Y.

"We have glanced through THE AMERICAN ARTISAN ADVERTISING MANUAL, and it certainly ought to be of considerable interest to the retail hardware trade, and we think you deserve considerable credit for the undertaking."

From "THE THRESHERMEN'S REVIEW," St. Joseph, Mich.

"A very effective monitor of retail advertising." "It should be a very valuable book for the dealer who wants newest ideas and best methods of expression in ad writing."

From "HARDWARE," New York.

"The book is a practical help for hardware dealers."

From "STOVES AND HARDWARE REPORTER," St. Louis, Mo.

"A fund of information on the subject of advertising calculated to enable the retail dealers to obtain the best results from newspaper advertising."

From "THE METAL WORKER," New York.

"THE ADVERTISING MANUAL will be found of assistance to stove dealers, sheet metal workers, plumbers, hardware men and all who seek to extend their business by advertising."

From "THE TRADESMEN," Chattanooga, Tenn.

"If the average hardware or stove dealer, to whom this book should prove of especial benefit, had some assistance in the preparation of his advertising copy, he would be able to prepare advertisements at all times that would be of the business getting kind."

It should have a place in every store.

Improve your advertising, Mr. Dealer. THE AMERICAN ARTISAN ADVERTISING MANUAL will aid you. Secure a copy to-day.

The book retails at $3.50, and it can be obtained from your bookseller or from

DANIEL STERN

PUBLISHER

355 Dearborn Street, Chicago

Our Strictly New Furnace

Built to the Hour

A Powerful Perfect Worker

OUR NEW ONE

WHATEVER IS GOOD, NEW AND MODERN IN FURNACE MAKING HAS BEEN CONSIDERED IN THE PLANNING AND BUILDING OF THIS FURNACE. * HEAVY STEEL PLATE IS DESIRABLE FOR QUICK HEATING WE HAVE IT IN THE LARGE RETURN RADIATOR. * HEAVY CAST IRON IS DESIRABLE FOR DURABILITY IN FIRE SECTION, WE HAVE IT THERE. * LARGE DOORS ARE DESIRABLE, WE HAVE MADE THEM LARGE. * PROMPT RELIABLE ACTION IS ESSENTIAL, THEY ARE HERE CORRECTLY AFFORDED.

THERE IS NO MORE SATISFACTORY FURNACE THAN THIS. THEY MAY TIE IT BUT THEY CAN'T BEAT IT. HEAVY STEEL HIGH RETURN RADIATOR WITH CAST TOP AND BOTTOM. ASBESTOS PACKED JOINTS EVERYWHERE. BIG FIRE-POT, BIG ASH-PIT, BIG CLEAN-OUT, BIG DOORS GROUND TO PERFECT FITTING. HEAVY SEPARATE GRATE BARS. DUST TIGHT. GAS TIGHT. A VERY COMPLETE MODERN FURNACE THAT WILL SATISFY BOTH YOU AND YOUR CUSTOMERS

WALTER S. RAIT & CO.

211-213 Lake Street, CHICAGO, ILLINOIS.

Boynton's Square-Pot Crusader Furnace

IF YOU WANT A FURNACE

that will stand by your customer in the coldest winter weather, without constant attention, and will not eat up what ought to be a season's supply of fuel in two or three months, examine into the merits of the

BOYNTON SQUARE-POT FURNACES

You should have our Catalogue on file. A postal card brings it

Boynton Furnace Co.

147-149 Lake Street, Chicago **106 West 37th Street, New York**
230 Pacific Avenue, Jersey City

MAGEE EVERETT FURNACE

Magee HEATERS

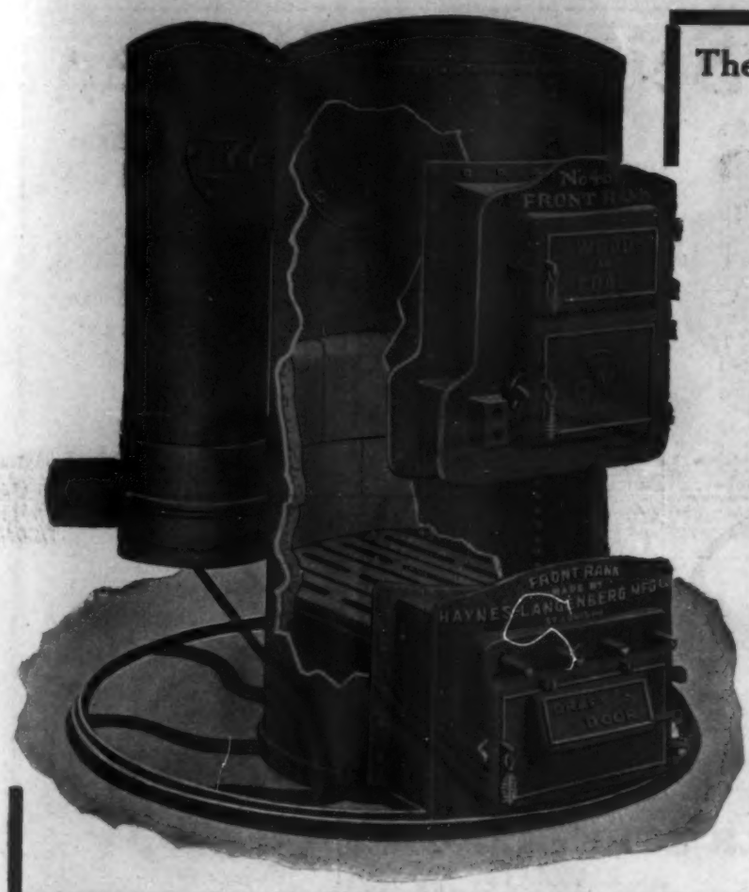
Write us about this one.

A low priced furnace made in three sizes, 19 in., 21 in. and 24 in. fire pots. Capacities 5,000 to 15,000 square feet. Dock-ash grate, 2-piece pot wrought iron radiator—for hard coal only.

Exclusive territory for this and four other styles.

Catalogs on request.

Magee Furnace Co.
86 East Lake St., CHICAGO, ILL.
Main Office, BOSTON, MASS.



The Most Prosperous Dealers in Every Town

Are Those Holding

Front Rank Steel Furnace

Agencies. The reason is easy. They are offering a furnace which is known the world over as

"The Acme of Furnace Perfection"

Every detail of its construction is correct. There are no faults or weaknesses. The very fact that there are 12,000 **FRONT RANK FURNACES** in the city of St. Louis alone and that every one of them is giving absolute satisfaction is positive evidence that the **FRONT RANK** can be backed by any dealer's reputation.

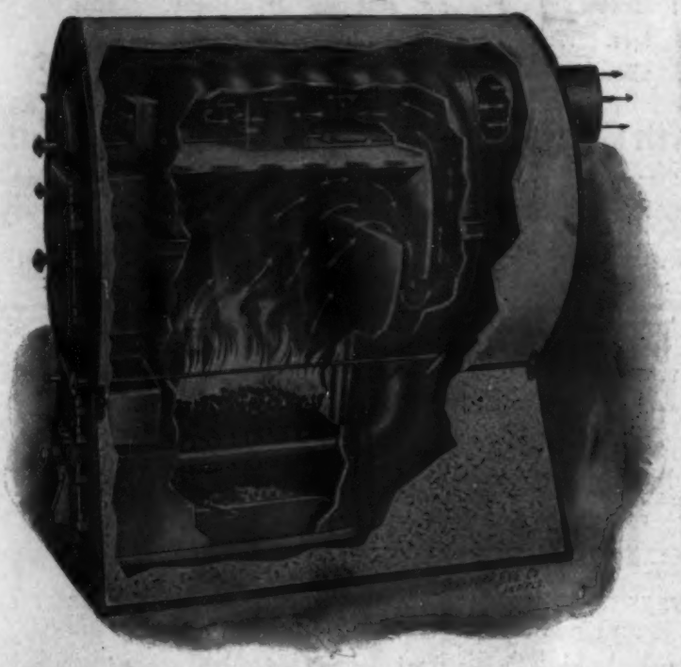
WE WANT GOOD AGENTS

Write for our Catalog and terms today.

Haynes-Langenberg Mfg. Co.

4045-4057 Forest Park Blvd., ST. LOUIS, MO.

The Majestic Warm Air Heating System



An original and new idea for generating warm air.

We illustrate here a sectional side view of No. 25 Series, burning coal, showing travel of smoke and hot gas through the radiator flues, which course it is compelled to take before allowed to pass to the smoke pipe, and by so doing comes in direct contact with the heavy corrugated surface of the combustion chamber.

Note the ease with which radiator flues can be cleaned. All the soot dropping to cast elbow in rear, where it passes into ash pit.

The MAJESTIC looks mighty good and is just as good as it looks.

It is low down in height (52 in.) and low down in price. Sure to sell wherever introduced.

Write for Catalog

Majestic Furnace & Foundry Co.

Huntington, Indiana

Faultless Scientific Heater

Showing Flue Construction, Fire Pot and Extension Flue Partitions.

The Highest Type of Furnace Perfect in Every Detail

The most severe tests for two years prove IT TO BE AN UNQUALIFIED SUCCESS

The air is heated in separate currents and can be carried long distances and to any desired part of the house. No overheated air is possible with this heater.

The number of square feet of radiating surface, compared with the grate surface, is **much greater** than in any ordinary furnace.

No other Heater of this class can be so easily mounted.

An examination will convince **you** and you can as readily convince your best class of customers.

The **exclusive agency** for this **Incomparable Heater** will be a valuable asset to any good furnace dealer.

THE GRAFF FURNACE COMPANY

208 WATER STREET, NEW YORK.

A Passport to Comfort

Is what everyone receives who buys a **XXth Century** Heater. Dealers are reaping the benefit of this fact. Write for illustrated catalogue which tells all about it. Mailed promptly on request.

XXth Century Heating & Ventilating Co.

Manufacturers of the Celebrated XXth Century Line of Warm Air Furnaces and Steam and Hot Water Boilers.

GENERAL OFFICE AND FACTORY AT AKRON, OHIO.

Furnace Men Attention!

We make what you have long been looking for, a strictly **high grade** furnace at a very **moderate** price.

THE AJAX IS A WINNER.

It always does the work. Absolutely no failures. Call and see it and be convinced. Always glad to show goods.

Co-operative Foundry Company

Rochester, N. Y.

Western Branch: 264 S. Clinton St., CHICAGO, ILL.
Phone Harrison 6373

Constantly Imitated—Never Equaled

THE SUCCESS

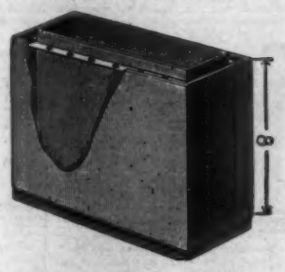
Ask the man who has one

RICHARDSON & BOYNTON Co.

Chicago - New York - Boston

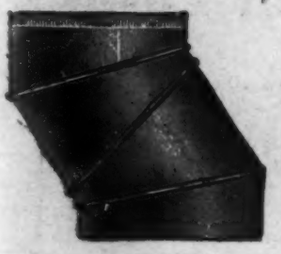
A Perfect Hot Air Furnace Pipe

EASILY AND QUICKLY ERECTED



The Stiffest and Best Machine-made Pipe on the Market, and **the only Sectional Furnace Pipe in which the inner walls form the cross-walls.**

There are no wings to pull out and no cleats to bend. The joints fit perfectly and there is positively no buckling

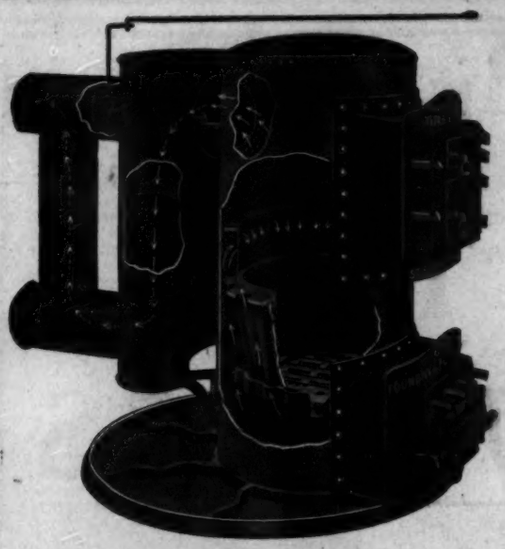


This Pipe is the result of twenty-five years' experience and effort toward perfecting a Sectional Wall Pipe and is a complete success.

WRITE FOR OUR LATEST CATALOG

The Michigan Safety Furnace Pipe Company

Corner Brooklyn and Abbott Streets, DETROIT, MICHIGAN



LINCOLN STOVE REPAIR CO., Lincoln, Nebraska.
State Managers for Nebraska.

ROWE CONSTRUCTION & HEATING CO., Watertown, S. D.
State Managers for South Dakota.

Do You Know Why People are buying Green's Base Heater Furnace?

Because it gives more heat with less fuel than is required to operate the average furnace.

The carbon and gases passing off unconsumed from soft coal mean just that much money lost up the chimney. By burning this carbon and converting it into heat, it not only does away with the smoke nuisance, but reduces the amount of fuel necessary to secure the desired heat, consequently a big saving in coal is effected. It is not the money paid for the furnace when installed which constitutes the cost, but the amount of fuel it consumes after it is in operation. The slotted fire bowl in this furnace admits the heated air and the oxygen ignites and burns the carbon.

Write for catalogue giving full description of this and of the furnaces. Do this to-day.

Green Foundry & Furnace Works,

2d and Vine Streets, - - DES MOINES, IOWA.

Gilt Edge Furnace

Dealers have the co-operation of the makers and the satisfaction of thousands of satisfied users to back up their arguments in making sales. "Gilt Edge" insures the greatest economy, durability and power.

GILT EDGE

Our publicity department will co-operate with you. Write for selling methods and catalogs, etc., etc.

R. J. Schwab & Sons Co.

Manufacturers

287 Clinton Street, Milwaukee, Wis.

Our side wall registers take the lead among leaders. Our tin and galvanized iron pipe and fittings fit.

The Distinctive Feature of The

Floral City Capitol Furnace

is the Dome or Body with the outer return flue or **HORSESHOE RADIATOR.** This dome is high enough to give an extra large combustion chamber and at the same time the furnace is low in height and adaptable for low basements.

No cheap or flimsy materials are used on any part of this furnace, and as a whole it is **Durable** and **Powerful** as well as **Economical.**

Write for Catalog Containing Complete Description of the CAPITOL FURNACE and Illustrating and Describing Other Heaters of Our Line.

Monroe Foundry & Furnace Co.

Monroe, Michigan

Did You Ever Stop to Think

what a large addition to your PROFITS can be made each year by installing furnaces. But it is the same with furnaces as it is with other things—you've got to give your customers an article of QUALITY—otherwise they'll not be repeaters.

Give them a "MUELLER"—they'll appreciate it after a short trial, and you will be surprised at the amount of advertising these customers will do for you. TRY IT.

L. J. MUELLER FURNACE COMPANY

Established 1857 — 191 Reed Street, Milwaukee, Wis.

A Mt. Penn Specialty

PENN

THE PENN PERFECT

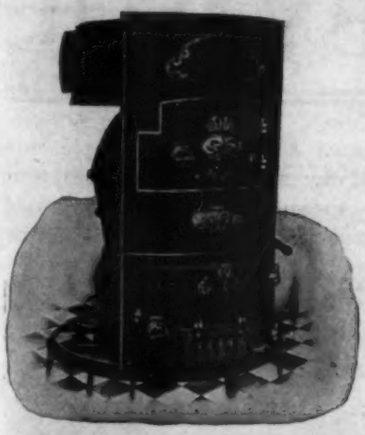
Combination Hot-Water and Hot-Air Furnace

This is the finest combination furnace made. The hot water section performing its work thoroughly without taking from the efficiency of the hot-air construction and the hot-air section in no way interfering with the elegant proficiency attained in hot-water heating.

HOT-AIR HEAT WHERE DESIRED—HOT-WATER HEAT WHERE NEEDED—all with one heating apparatus. Write for catalog.

MT. PENN STOVE WORKS

READING, PA. 111-113 N. 2nd Street, PHILADELPHIA, PA.



OUR NEW

De Haven All Cast Furnace

STRICTLY MODERN AND UP-TO-DATE IN EVERY RESPECT

All the latest features in modern furnace construction are embodied in the make-up of this furnace. Features:

Extra Heavy; Gas Tight; Burns all Grades of Hard Coal, Soft Coal and Wood; Simple and Economical to Operate; Top Return Flue Radiator; Large Radiating Surface; Rolling Bar Grate.

WRITE TODAY FOR CATALOG AND PRICES

Youngstown Furnace & Supply Company

Manufacturers of the Celebrated **LION-APEX** and **BESSEMER** Series of Furnaces

Niles, Ohio

Chicago Branch
218 East Lake Street

ROOD & McINTYRE
Kansas City, Mo., Southwestern Distributers

THE AMERICAN ARTISAN ADVERTISING MANUAL

A NEW ONE, JUST OUT. The most complete and most valuable treatise upon the subject of advertising as it is applicable to the retail merchant ever published. ::: NO DEALER CAN AFFORD TO BE WITHOUT IT.

Price $3.50 Per Copy. For Sale by Your Bookseller or By

DANIEL STERN, Publisher, 355 Dearborn Street, CHICAGO, ILL.

"K-M-C" LAUNDRY and TANK

Heaters

Plenty of hot water for all purposes at little expense in Dwellings, Laundries, Baptistries, Hotels, Apartment Houses, Barber Shops, etc. Many styles and sizes. Capacities 50 to 700 gallons per hour.

The "Improved Giant"

A powerful heater. Our handsome new Tank Heater Hanger will help increase your sales. Free upon request.

Kellogg-Mackay Company
CHICAGO
Minneapolis Seattle

SYMONDS WALL REGISTER

SYMONDS REGISTER CO. 1102-04 MADISON ST. ST. LOUIS, MO.

MONCRIEF
TOP RETURN FLUE WARM AIR
FURNACE

A strictly modern, up-to-the-times furnace that invariably gives satisfaction to every user. Here is a furnace that any dealer can stake his reputation on. Every feature of merit known to first-class furnace construction will be found in its make-up. Every part is perfect and every detail has been given careful attention.

It's THE furnace to offer your most particular customers. Write for our Catalog.

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J. C. KIMMEL, 3314 E. 15th St., Kansas City, Mo., Western Sales Agent.

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THE Publisher of the American Artisan will take pleasure in supplying books of whatever character, at catalogue prices, prepaid by mail, to any address, on receipt of price. The following are lines specially represented:

Sheet Metal Working. The Foundry.
The Workshop. Heating and Ventilating.
Plumbing and Drainage.
The Store and Office. Bicycle Repairing.

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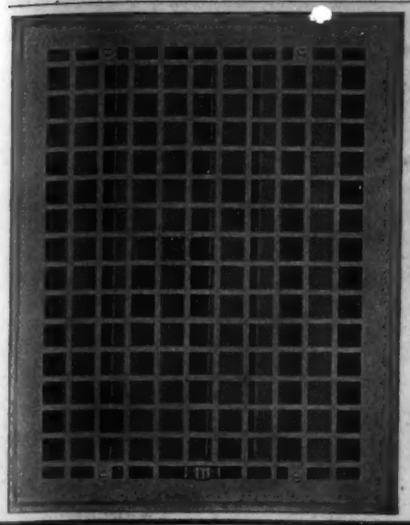


The New "Roller" Movement

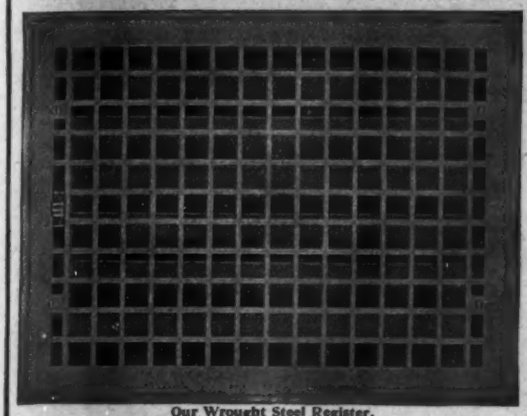
Take one of your **STEEL** Registers out of stock and see if it is hard to open, and the movement sticks.

If so, try one of our New Roller Registers. It works like a ball-bearing.

Two styles — All steel and semi-steel.

TUTTLE & BAILEY MFG. CO.

NEW YORK CHICAGO BOSTON



Our Wrought Steel Register.

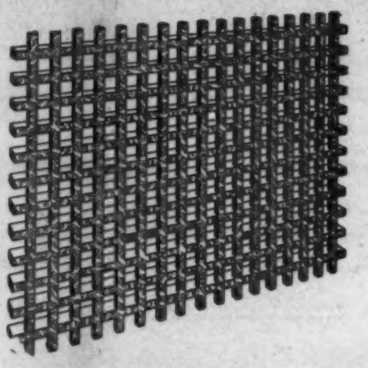
SOME REGISTER MEN

Make
Cast Iron Registers
Others make
Semi Steel
Still others make
Wrought Steel

We make ALL THREE KINDS

Buy where you can get EVERYTHING

Ferrosteel Company, Cleveland, O.



The PADGETT

Hard Wood Cold Air Faces & Ventilators

have become so popular that others are trying to imitate them. The genuine Padgett goods are made by a process discovered and known only by the owner and inventor. No imitation will give the service, have the durability and beauty of the Padgett ventilators. Imitations are cheaper first cost, but much dearer in the end. Who wants a cheaply constructed ventilator in his home that will ruin the appearance of the room in a short time? Ask for the Padgett Hard Wood Cold Air Face, manufactured by

THE WOODEN VENTILATOR COMPANY

No goods genuine without the Company's stamp, watch for it.

BRANCH WAREHOUSES:

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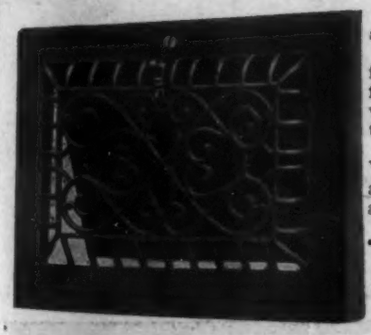
MAIN OFFICE AND FACTORY, EAST PALESTINE, OHIO

Walworth Deflecting Wall Register

FOR BASEBOARDS



Can be used on a "Double Head."

This register takes the place of the convex, and costs less money.

It takes up no room in the wall pipe, has a face of large open area, is made in standard sizes, fits regular stock sizes of fittings, is equipped with a wall frame and is attached to the pipe in the same manner as the ordinary valve register.

Our registers are made in **THREE STYLES**, Vertical, Horizontal and Baseboard. We are also makers of the famous **SEMI-STEEL** Floor and Convex Register, all sizes and finish.

LET US QUOTE YOU PRICES

The Walworth Run Foundry Co.

Largest Gray Iron Foundries. Estimates Furnished for Castings.

Fillmore, Talcott and West 27th Streets
CLEVELAND, OHIO

FOR SIDE WALL

GET THE FACTS

There's no room for difference of opinion,—whether the STERLING Heater gives better results than a Base Burner.

All that count are the **facts.**

The time it takes each stove to raise the temperature of a given room a given number of degrees,—the number of pounds of fuel used in a given time,—the ease of control.

These are things you can see demonstrated before your own eyes. And when you have the actual, provable facts,—just draw your own conclusions. That's all we ask. The

STERLING HEATER

MODEL "O"

Needs no salesmanship outside of a demonstration of what it will **do.**

We'll gladly send a Photographic Reproduction of this great stove. We'll tell you what has been proven by hundreds of severe tests. We'll give you the facts and the figures.

Then we'll send a travelling man to your town to let you see the stove yourself,—and see how it acts. We'll let you test it yourself in your own way.

And after that we'll name you prices,—and they'll prove beyond question that no Base Burner can ever compete in your town with the STERLING Heater.

Just to get things started,—will you clip out the COUPON, and send it in today?

SILL STOVE WORKS

534 OAK STREET **ROCHESTER, N. Y.**

See the STERLING *first.*

.....May.....1909.

SILL STOVE WORKS, 534 Oak Street, Rochester, N. Y.

Gentlemen—What's this about the new STERLING Heater that is "a better heater than any Base Burner"? If you have the proof, I certainly want to know about it. When and where can I see this stove in operation?

Name.....

Address.....

ESTABLISHED 1880.

THE AMERICAN ARTISAN & HARDWARE RECORD

Representative of the Stove, Tin, Hardware, Heating and Ventilating Interests.

PUBLISHED EVERY SATURDAY.

TERMS OF SUBSCRIPTION IN THE UNITED STATES AND ITS POSSESSIONS, (Invariably in advance): ONE YEAR, POSTAGE PAID, $2.00. IN FOREIGN COUNTRIES INCLUDING CANADA, ONE YEAR, POSTAGE PAID, $4.00

Address all Letters, Communications, and Remittances to

DANIEL STERN, PUBLISHER AND PROPRIETOR,

355 DEARBORN STREET, CHICAGO, ILL.

Entered as Second-Class Matter June 25, 1885, at the Post Office at Chicago, Illinois, under Act of March 3rd, 1879.

CHICAGO, MAY 22, 1909.

IF PLANS started in London mature on this side of the ocean, a combine will be formed to control 70 per cent of the world's supply and stock of lead. English, German, Spanish and American interests are to be brought into the combine, which is planned to boost the price of lead from $68.75 a ton to $95 or $100 a ton. The profits to the combine from such an increase in prices will be from $125,000,000 to $225,000,000.

BEFORE sailing for Paris on May 13, President W. E. Corey of the United States Steel Corporation expressed gratification at improved conditions. He said: "Since the early part of March there has been a gradual and well-sustained improvement in the general steel industry, particularly noticeable in the companies of the United States Steel Corporation. We are now working at a 70 per cent basis of normal capacity. This is the highest since October, 1907. Improvement is due to natural and healthy demand for our products. With an average crop and early tariff adjustment we should expect an early return of prosperity. As for prices there has been upward and gradual improvement."

J. H. FINNEY of Washington, D. C., secretary and treasurer of the Appalachian Forestry Association, recently spoke before the Traffic Club in Chicago on "Some Aspects of the Forest Question." "Our forests are being devastated three times as fast as the trees can grow," he said, "and if we do nothing in the present generation, within fifteen or twenty years there will not be a stick of merchantable timber left." The remedy, he said, was rational lumbering, the application of scientific methods which will cut timber in such a way as not to prevent trees from growing again in the same place. Coal and natural gas also were mentioned as being subject to unbusinesslike waste. "Last year we used five tons of coal per capita and three were wasted," said Mr. Finney. "One-fourth of the natural gas produced was wasted."

A COMBINATION to control the price of zinc in America is said to be planned by the mining men of Missouri, Wisconsin, Illinois and Iowa. It is proposed that there be an agreement between the Wisconsin Mining Association and the Missouri Lead and Zinc Association, which include practically all the properties in their respective districts, to cease production at any time when the price of zinc concentrates falls below $40 per ton, the concentrated to be rated on the basis of 60 per cent metal.

PROMINENT business men of Cincinnati, Ohio, are interesting themselves in a national movement to change business hours during the summer months, after the custom in England, which makes the day begin two hours earlier in the summer than it does during the other months of the year. The plan provides that each year on May 1 the standard time of the United States be advanced two hours and continue thus until October 1. In this way it is intended that persons who start to work at 7 o'clock in the morning during the other months shall begin their days at 5 o'clock in the summer months and end work two hours earlier.

VICE-CONSUL-General E. G. Babbitt, of Yokohama, writes that he occasionally has requests from American manufacturers or exporters for suggestions as to the best methods of advertising their wares in Japan, and he forwards an incomplete list and sample copies of important newspapers and magazines published in that section, together with addresses and advertising rates. These will be loaned to inquirers by the Bureau of Manufactures, Washington, D. C. Mr. Babbitt suggests that the best method of placing advertisements, as to both choice of publications and rates, is through a good advertising agent. Many foreign manufacturers take advantage of the opportunity to advertise in the Japanese language in vernacular publications devoted to their lines and reaching the people likely to be interested.

Abundant Evidence of Returning Prosperity.

SURPASSING in importance all other matters having a financial bearing last week were the many signs of returning business confidence in the United States. The stock market, although active and strong, did not fluctuate widely, and there were few if any striking news events in which Wall Street was greatly interested. But from every side came reports of enlarging business operations. Great increases in the weekly gross earnings of railways were constantly made known, but proof of the picking up of business of the industrial companies was even more noticeable. Orders flowed into the iron and steel manufacturing concerns with more rapidity than in any previous period this year, and the tendency of prices was distinctly up within all these quarters. No doubt the time of year is approaching when the iron and steel

business is normally dull, at least in a comparative sense, and it should surprise no one if, during the next few months, activity in this line should be lessened, but there is still the best of reasons for believing that the iron and steel business during the summer months will be much better than it was a year ago.

Money rates remained practically unchanged during the week, and, although sterling exchange continually hovered around the gold export point, but a small amount of gold was sent out of the country. That manufacturers are making preparations for an enlargement of their operations is disclosed plainly enough in the increasing volume of the country's imports. Immense purchases of raw materials in foreign countries early in the year for manufacturers' use have already attracted wide attention.

During the week the government's monthly statement of the country's exports and imports showed that in April imports had again increased in the large sum of $34,700,000 over those of April, 1908. The foreign exchanges are still working unfavorably to this country, and further outward shipments of gold were conducted during the past week, while the rates for sterling remain obstinately high. It goes without saying that the ease in the money market and the slow work of tariff revision contribute to this last-named state of affairs. With the bank reserves at their present reduced levels the future of the money market, particularly during the autumn months, presents some points of interest; however, particularly if the expected general recovery in trade assumes substantial proportions upon the conclusion of the tariff revision. Besides, by that time there will arrive the usual demands from the interior for currency for the purpose of moving the crops, although, it is true, on the other hand, that the Western and Southern banks are better fortified with respect to reserves this year than those in New York. It is a question, also, as to whether the appearance of materially higher rates for money would not result in another reversal of form in the foreign exchanges. At any rate, if the rates posted for loans for long-time periods have any significance, and it must be admitted that frequently they have proved misleading, there seems to be small prospect for any actual money market stringency during the remainder of the year.

The investment situation retains the strong and healthful tone which has prevailed in that important quarter for a long time. Seemingly the possibility of a closer money market has exerted little or no influence in that direction. Bankers experience little difficulty in disposing of new offerings of merit, and it is hardly necessary to repeat that this phase of the general situation is one of the most encouraging that can be named in taking a long-range view of the probable course, not only of the market for securities, but of the development of the country's industries.

Attention has, of course, been attracted in Wall Street by the increases being shown in monthly and weekly reports of the earnings of the railway companies. It may be questioned, however, whether an even stronger impression has not been made upon the minds of financiers and investors by the various and unmistakable proofs adduced of the strong condition and prosperous outlook for so many industrial companies. The general truth on this subject is that many of the older industrial organizations of the country, those that have been conducted for a number of years and have attested in this time that they are going, paying and well-managed concerns, have arrived at a point where their net earning capacity year in and year out stands at an irreducible minimum that justifies a larger degree of investment confidence in them than has ever before been given. The earnings of not a few of these companies are greater now, and have been in the last two months far greater than is commonly understood in Wall Street or throughout the country.

If there was any special news last week it was that pertaining to the increasing orders for iron and steel materials, and the entrance at last into this field of purchase of the railway companies. The Chicago, Milwaukee and St. Paul and New York Central companies have already placed large rail orders, and in all probability the Baltimore and Ohio and Harriman lines will soon make similar contracts. The president of the New York Central stated last week that the car loading over his lines was greater in the month of April than it was in a similar month in any year, with the single exception of 1907, and that thus far in May the loadings have been greater than in May, 1907. The last fortnightly report of the amount of idle freight cars over the country placed the quantity thereof at the lowest number of the year.

France and Its Strike.

PARIS advices represent the strike of the postal, telephone and telegraph employes as in its initial stages bearing the surface indications of a fiasco. The number of strikers compared to the total of employes is reported as small, and the assertion is made that the government has little difficulty in maintaining the service.

These reports, of course, may be tinged by the hope of the Government for success in the struggle. There is no doubt, however, as to the aspect of the strike as it interests other nations; that is the exemplification of the government operation of public services and industries.

It used to be one of the stock arguments of the advocates of public ownership that it would abolish strikes. As an argument this was pure dogma, and it is now shown to be false dogma. It is not only exemplified that government employes can strike but that they can strike for avowedly revolutionary purposes, and upon demands intended to overturn the effectiveness of the government itself.

If the employes of a government can defy its authority, who will respect it? Between a private employer and his employes it is right that they should stand on equal terms of contract. Between a government and its employes the supremacy of the government is essential to have any government at all. It seems probable that the French strike will fail. Whether it does or not the effect of the strike will be to set public opinion in England and America more strongly than before against the doctrine of enlarged government ownership and operation of business enterprises.

RANDOM NOTES AND SKETCHES.

BY SIDNEY ARNOLD.

> *All requests for leave of absence owing to grandmother's funeral, lame back, house cleaning, moving, sore throat, turning the wringer, headache, brain storm, cousin's wedding, general indisposition, etc., must be handed to the CHIEF CLERK not later than 10 o'clock ON THE MORNING OF THE GAME.*

Such was the way a notice read that I recently saw posted up in the office of the secretary of one of the local stove associations. Nothing doing as to the name of the secretary or the association. Suffice it to say that the notice was there in plain lettering and could easily be deciphered by any person, even one suffering from astigmatism of the worst type. I thought after I had read it, "Well, that's the best remedy for the trouble that was ever discovered." And I honestly think it is. If any one has a better prescription I should very much like to know of it, for I think that this one will cure the most malignant case of *Dementia Baseballana* that ever happened. In case you may wish to apply the remedy for any chronic cases that you may have, don't mutilate THE AMERICAN ARTISAN by using the shears, but copy the prescription, have it typewritten or printed, and use *per diem* as directed.

* * *

John D. Rockefeller, in his latest article in one of the magazines, declares it is difficult to get rich, and illustrates his argument with his own early experiences. The author says he came of a family of modest means, in which there was a close family life, which he counts a blessing. His first business deal consisted in selling turkeys, which his mother gave him for "minding them." One incident which the author seems to relish occurred when he and his brother William ran away to go skating. They discovered a man drowning and rescued him, but explanations availed nothing at home, and they were "switched" for their adventure. High school and bookkeeping in a commercial college in Cleveland completed Mr. Rockefeller's school experience. Then for three weeks he walked the streets, asking merchants if they "didn't want a boy." His first employment was with the firm of Hewitt & Tuttle of Cleveland. He did not ask what wages he was to receive, and after three months he was paid $50. The salary next year was $25 a month. The third year it was $700. He wanted $800, and when this was refused he resigned to go into business for himself. With M. B. Clark he formed a partnership, his investment being $1,000, which he borrowed from his father. The business was loading and unloading carload produce. Mr. Clark at the time of his death was the principal owner of the Cleveland Co-operative Stove Co. Of his quality to win the friendship of men Mr. Rockefeller writes proudly, and dwells in a like vein on his first church work, when he was 18. The pastor announced that unless $2,000 was raised the church must close. Rockefeller stood at the church door after services, buttonholed well-to-do men in the congregation, raised the $2,000, and saved the church. Money in bulk was not always at the command of Mr. Rockefeller, according to his narrative. He was often compelled to borrow from his father, who would then suddenly demand it, doing so, Mr. Rockefeller writes, to test the credit of the son. One time the firm's largest consignor wanted to borrow money on current shipments which had not arrived. "I knew," he writes, "that this was wrong and refused the request." This installment of the career of the world's richest man concludes with divers similar incidents, used to illustrate "the difficult art of getting," the title of his article.

* * *

Wonderful to tell! The ladies, who can scarcely get into an upper berth in a sleeping car with a ladder and a porter to aid, fairly sailed into it in court recently during a Pullman case hearing. Mrs. McNulty was the first witness against the institution. She estimated the value of an upper berth at half that of a lower. She said it was worse ventilated, harder to get in and out of, and less convenient to dress in. She had ridden in it when forced to do so and knew whereof she spoke. I take it that Mrs. McNulty expressed the prevailing opinion not only of her own but of the sterner sex. All efforts to popularize the upper berth have failed. It is regarded as the crowning misfortune of a journey. The reasons given by Mrs. McNulty do not entirely explain the general antagonism. There must be others. Among these I am inclined to place the fact that the upper berth unfortunately resembles a shelf. Now, average men and women hate to think of themselves as laid on the shelf. They feel their merits are above such treatment. It piques their pride. Another reason is the suggestion of inequality. If all the berths were upper berths people would probably be very well satisfied with them. We should hear little of these inconveniences which now cause such complaint. But human nature is human nature, and when a man finds himself compelled to do some little thing that someone else who is paying the same price doesn't have to do, a deep sense of wrong wells up in his soul and the justice of men seems vain. There is, however, one redeeming fact in connection with this inequality; it is not based on an invidious personal distinction. It arises simply because the other man happened to buy his ticket sooner. So far as my experience goes, the porter regards the upper berth man as the equal of the lower berth one—the tips being equal. That should be a partial consolation.

* * *

For practical poetry, these four lines which are credited to the *Pittsburg Post* are certainly the goods. They are indeed worthy of a prominent place in my "peerless collection."

> Some advertise when things grow slack,
> And get a lot of business back.
> But "biz" with some is always prime;
> They're advertising all the time.

News Siftings

The Safety Refuse Burner Co. of Chicago has been incorporated with a capital stock of $5,000 by M. A. Mueller, August Heineman and J. J. Elias.

The Thos. White Stove Co., at Quincy, Ill., are exceedingly busy; their old and popular lines of stoves are meeting with favor and they have just completed four new lines of cast ranges of modern construction with drop oven doors.

Plans for the new stove foundry to be erected at Evansville, Ind., by the Southern Stove Works, include a colony of cottages. Many of the foundry employes will occupy them and be within a stone's throw of the foundry. About $50,000 will be invested in the plant.

Henry Wilson, the veteran representative of the Thos. White Stove Co., of Quincy, Ill., has just returned from a trip to British Columbia and the Pacific Coast, and will soon start to make his regular calls on the stove trade in Kansas and Oklahoma.

The Ohio State Stove Co. of Columbus, Ohio, which was organized some time ago to manufacture gas stoves and heaters, is now operating its plant and reports a very satisfactory start. The company has put a force of traveling men on the road and looks for a good season's business. All of the company's patterns are said to be new, and its products are credited with embodying a number of new features in gas stove construction.

Fire, which as previously reported in THE AMERICAN ARTISAN, recently destroyed the stove foundry and machine shop in the Oregon State Prison, at Salem, Oregon, entailed a loss estimated at $200,000. The foundry was the largest in the Pacific Northwest. The State of Oregon owned the building and had invested many thousands of dollars in machinery. Part of the loss falls on the Northwestern Stove Foundry Co. of Portland. The industry employed 225 convicts and some 25 free men.

URGES A HIGHER DUTY ON AMERICAN STOVES ENTERING CANADA.

As going to show to what extent the Canadian stove trade is affected by American competition, some facts and figures were recently cited by Representative T. J. Stewart of Hamilton, Ontario, in the lower branch of the Canadian Legislature at Ottawa. Mr. Stewart stated that the stove plants at Hamilton had been in operation for only fourteen months during the past twenty-four. In making a plea for better protection of the Canadian stove industry, necessitated by competition from the United States, the speaker asserted that stoves are being retailed in Canada at prices which Canadian manufacturers could not afford to meet. In the course of his remarks Mr. Stewart stated that at least 400 cars of stoves were shipped into Canada from the United States during the latter part of last year. In order to change this state of affairs, Mr. Stewart suggested raising the duty on American stoves entering Canada 10 per cent ad valorem. The effect of American competition on the Canadian stove trade, the speaker stated, has been especially noticeable since the financial depression of 1907.

"RATTLER" AIR-TIGHT HEATERS AND "MARSHALL" BASE-BURNERS.

M. Travilla, stove manufacturer, Quincy, Ill., is distributing two circulars in one of which is described and illustrated the firm's line of "Rattler" air-tight heaters for wood, while in the other attention is given to "Marshall" base-burners. The "Rattler" series of air-tight heaters are declared to be the best made stoves of this class on the market. They are full size according to the numbers, and are lined with heavy steel two-thirds of the way up. The feet can be bolted in so that they will not become detached, which insures safety. These heaters are ornamented as much as is necessary to render them neat in appearance while not adding to their cost. M. Travilla states that it will be to the advantage of all dealers to handle the "Rattler" line of heaters for the reason that they are sure to give satisfaction.

"Marshall" base-burners for hard coal are declared to be the most powerful heaters manufactured, being full base heaters and having four three-inch columns through which the heat must pass before entering the back pipe column, which extends from the extreme base of the stove to the top. The heat is drawn from the bed of the fire to the top or dome of the stove into and down the four three-inch columns, thence into the base of the stove around the three flues in the base and out into the back pipe column which is six inches in diameter and extends from the base to the top of the stove. The manufacturer states that the construction of the "Marshall" makes it a fuel saver in every sense of the word. It is very highly ornamented with nickel plate of modern design and makes a most attractive heater for the home. When writing M. Travilla, kindly mention THE AMERICAN ARTISAN.

THE "GOOD LUCK" GAS STOVE.

The Stove & Range Co. of Pittsburgh, Pittsburgh, Pa., state that their "Good Luck" gas stove multiplies the power of the gas. This stove is fitted with a special fire tile back wall, the front or fire surface of the back wall being covered with wedge-shaped radiating pins of the same material, increasing the surface of this face 100 per cent. The rear surface of the back wall is also a prime radiating surface. The cast flame trellis fills the entire fire place opening of the stove. It is sectional and can be lifted out. The radiating surface of the flame trellis is declared to be equal to the rear surface of the tile back wall. The "Good Luck" gas stove, in addition to its great heating power, due to the large radiating surface, is also a powerful air circulator. No. 17 is credited with circulating 3,000 cubic feet of air per hour, while No. 18 will circulate 4,000 cubic feet. When writing the Stove & Range Co. of Pittsburgh, kindly mention THE AMERICAN ARTISAN.

The Hardware Record.

THE AMERICAN ARTISAN AND HARDWARE RECORD is the only publication containing western hardware and metal prices corrected weekly. You will find these on pages 36 to 41 inclusive.

The Clawson Lock Mfg. Co. of Kansas City, Mo., has been incorporated with a capital stock of $100,000 by P. E. Clawson, F. E. Burroughs and J. L. Porter.

The Burriss Metal Roofing Co. will establish a plant at Charlotte, N. C., to manufacture metal shingles, etc., after patterns made by John T. Burriss & Son of Anderson, S. C.

Benjamin Cannon, formerly a hardware merchant of Deerfield, Mich., died at his home in Deerfield on May 7 at the age of 74 years. He is survived by a widow, one son and a daughter.

The Staley Mfg. Co. of Martinsville, Ind., has been organized with a capital stock of $25,000 to manufacture washing machines by Harrison L. Staley, Clarence M. Schnaister and Charles E. Hubbard.

The Hampton Roads Cutlery Co., Norfolk, Va., has been chartered with a capital stock of $150,000. The officers are: President, C. T. Alexander; vice-president, M. L. Baker; secretary, R. H. Riddleberger.

Stanley G. Smith, Woonsocket, R. I., secretary of the American Wringer Co., met death in an automobile accident on May 15. He was 41 years of age and was identified with various other business enterprises.

The Daisy Safety Razor Co. of Jersey City, N. J., has been incorporated with a capital stock of $50,000, to manufacture safety razors. The incorporators are: Wm. H. Rees, Charles C. Kelly, and Geo. W. Rurode, all of Jersey City.

The tenth annual convention of the National Retail Hardware Association will be held at the Hotel Pfister, Milwaukee, Wis., on May 25 to 28. It is expected that about 200 delegates from the United States and Canada will attend the convention.

A. Duenweg, a prominent hardware merchant of Brush, Colo., was recently adjudged insane and is now in a sanitarium. The business will be carried on by his son, Elmer Duenweg, who has practically had charge of the business for a couple of years.

F. E. Stehlik, manager of sales of the "Electra" Lightning Rod Co., Cresco, Iowa, called at the offices of THE AMERICAN ARTISAN during the week. Mr. Stehlik reports business good and a steadily increasing demand for "Electra" copper cable lightning rods and fixtures.

The plant at Riverside, Cal., of the California Lock and Hardware Co., will have a capacity for the employment of 400 men. It is expected that the buildings will be completed, machinery installed and operations begun by July 1. The cost of the plant and equipment will be about $150,000.

Duncan A. Maccuaig of Nebraska City, Neb., has been granted a United States patent on a caster-retaining device formed of a single piece of wire having overlapping oppositely disposed loops extending in opposite directions about the caster pintle. Retaining devices are carried by the loops and located in spaced relation to the pintle.

Following are the officers of the Alabama Retail Hardware Dealers' Association elected at the recent annual convention held at Birmingham: J. N. Cureton, Lothan, president; J. E. Gamble, Wetumpka, first vice-president; F. M. Kelly, Selma, second vice-president; W. G. Smith and J. W. Beasley, delegates to National convention.

An American consular officer in a certain city of Northern Europe gives the name of an American citizen there who desires agencies for American manufacturers of hardware, toy spades, garden and agricultural tools, etc. By writing the Bureau of Manufactures, Washington, D. C., and referring to File No. 3415, the address may be obtained.

Stephen Thorn Fox of W. B. Fox & Bro., 21 Warren street, New York, hardware manufacturers' representatives, died on May 17, after a very short illness, at the age of 68 years. Mr. Fox began his career in the hardware business at Poughkeepsie, N. Y. He afterwards sold goods for P. & F. Corbin and later for Sargent & Co., New York.

Henry Disston & Sons, Philadelphia, Pa., are distributing to retail hardware dealers a very attractive sheet metal saw sign on which appear these words: "We sell Disston Saws." The sign is painted in a number of colors and is sure to attract attention if hung in a conspicuous place in the store. The four corners are rolled in toward the center rendering the design unique in character.

At the annual convention of the Mississippi Retail Hardware Association held at Jackson, Miss., on May 11 and 12, these officers were elected for the ensuing year: President, Mallory Davis, Itta Bena; first vice-president, Henderson Baird, Greenwood; second vice-president, A. P. Orrick, Canton; secretary-treasurer, John E. Sommers, Clarksdale. E. S. Crane, Yazoo City, and E. G. Peattross, Jackson, are members of the executive committee.

George Marquardt, for many years one of the leading hardware merchants of Toledo, Ohio, died in that city on May 8 after a long illness. He was 63 years old and had resided in Toledo practically all his life. He was engaged in the hardware business under the firm name of Marquardt & Wortsmith, but later became connected with the Showel Hardware Co. of Toledo, now merged with Birkmayer & Rodemich Bros. The deceased was identified with many fraternal organizations in Toledo. He is survived by a widow.

The Lefever Arms Co., Syracuse, N. Y., report more successes for the Lefever Gun. L. I. Wade on May 3 at the tournament of the Dallas Gun Club scored 94 out of 100. On May 4, at the preliminary shoot of the annual tournament of the Dallas Gun Club, Mr. Wade scored 96 out of 100. On the second and last day of the tournament, Mr. Wade scored 192 out of 200, shooting 75 from the 19-yard mark. At Corsicana, Tex., on May 7, he scored 116 out of 125. The Lefever Arms Co. state that the wonderful taper system of boring Lefever guns insures the very best possible results. The company request the trade to

write for their booklet illustrating and describing the guns mentioned.

A CHRISTMAS DISPLAY OF MORE THAN USUAL ATTRACTIVENESS,

The judges in THE AMERICAN ARTISAN'S recent Hardware Window Display Competition spoke in very favorable terms of the display submitted by L. A. Paddock with the Paddock Hardware Co., 427 E. 47th St., Chicago, and which is here reproduced. Mr. Paddock entered his exhibit under the name of "McGinty." His description of the window follows:

"The window was 9½ feet high by 10½ feet long. The window front was inclosed on the inside by a glass partition, providing a floor space 5 x 10½ feet, with a flat-iron shaped end extending to the left about 4 feet. This end the picture does not show. For this Christmas display the inside glass partition was ceiled up with ½-inch lumber and covered with red flannel cloth, making a complete and attractive background for the work in hand. The floor and the platform elevations were covered with white cheese cloth. The heavy plate glass frame or sash was trimmed up the sides and across the top with holly leaves and holly branches, laden with red berries, harmonizing well with the red background and converting the bare oak sash into a sort of rustic or vine-covered frame appropriate for a Christmas display.

"The goods displayed were, in the main, such as make practical holiday presents: Silverware, cutlery, carvers, sweepers, sleds, light and bathroom fixtures. In making the display, I had in mind the production of a picture, as well as producing an attractive exhibit of Christmas goods. I first built a centerpiece, then platforms or floor elevations with receding fronts and ends, so that every article could be prominently displayed and seen equally well from the street, at any angle or viewpoint. For a conspicuous display of lamps I made the centerpiece (in the background) represent an old-fashioned fire-place with chimney, and covered them entirely with mantles and lights, in the manner shown. In completing the display of illuminating goods I placed in the recess in the fire-place a portable lamp, with a red shade to be lighted up with electric bulbs. On the fire-place and about the chimney I placed the inverted and other lights. Close up in front of the chimney there was a board raised from the floor about 6 inches on which was placed a foot rail made of brass curtain rod supported at the corners and ends with gas mantles. On either side of this rail shaving mugs were shown. I took a stove board, turned it upside down, covered it with white cloth, tacked on five pieces of V-shaped velvet and had a Christmas star 36 inches in diameter. This was placed directly in front of the mantle, covering the space from the foot rail to the plate glass window. Circling the star on the white margin, safety razors and their boxes were placed, forming a complete circle, except a small space at the lower edge occupied by high-grade razors of the ordinary style. The star was covered with plain and fancy scissors. The velvet portion was covered with high-grade buck and pearl-handled pocket knives. On the slanting pieces on each side, kitchen, bread and butcher knives were placed. On the floor at the right of the star were silver knives, forks and spoons. On the incline were nut picks, nut crackers, sugar spoons and a "Knight's Templar" sword and shield, crossing a silver tea tray. On the elevation were silver tea sets, butter dishes, ladles, chafing dishes, tea and coffee pots, crumb trays, etc. At the left of the star were carvers. This constituted the exhibit of silverware and cutlery, especially suitable for holiday giving.

Honorably Mentioned By the Judges in THE AMERICAN ARTISAN'S 1909 Hardware Window Display Competition—Submitted By L. A. Paddock with the Paddock Hardware Co., 427 E. 47th St., Chicago.

"At the right, on the side wall and back of the silver, bath-room fixtures and necessities were shown. On the wall space at the right was a very handsome medicine case with shaving mug, bottles and powders. Below the mirror stood a porcelain lavatory on which a "Teddy" bear or two attracted the children. At the left of the lavatory were chamois skins, glass and nickeled towel bars, bath sprays, brushes and smaller

fixtures, and below, standing on the floor, was a square-shaped silver tea server. Above the fixture display were carpet sweepers, a hand sled, a bird cage, some small brass lanterns and some aluminum lemonade shakers. On the shelf above were bread and cash boxes. Back of the bird cage were some fancy door mats. Suspended from the ceiling were feather and wool dusters, of many sizes and grades. Only the larger show.

"At the left of the fire-place above the shelf were hand saws, steel squares and spirit levels. Further on to the left, running back into the flat iron end, were placed a number of hand sleds and savory roasters not shown in the picture. Below this shelf hung long strings of hockey ice skates, reaching down to the elevation under the large bulldog guarding the exhibit. This English bull is seen emerging from his room through a portiere made of nickeled dog chains, dog whips, etc., to have his picture taken. He has rare tastes. His little wedge-shaped room is cosily fitted with rugs, harness and collars in almost every style and size, dog whips, dog leads and blankets. He was very much at home there and seemed proud of the marked attention shown him.

"On the reclining side of the platform, on which the dog stood, extending back to the point of the flat-iron end in the dog room, machinists' and carpenters' tools were arranged. These do not show in the picture. On each side of the fire-place portable gas lamps with colored shades were shown, to balance the display and to help distribute the soft red and yellow light to be reflected on and over the goods below.

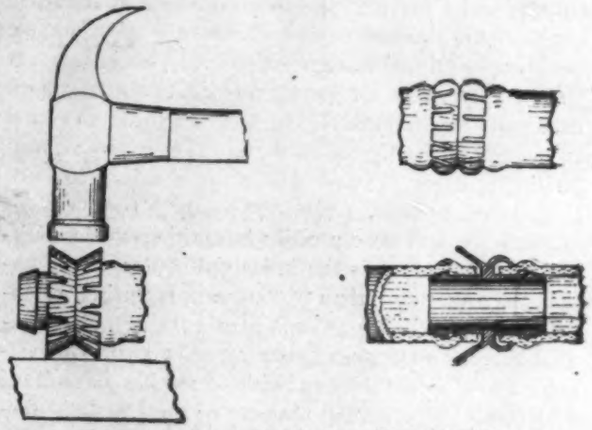
"In the final touching up, many articles shown in the picture, not originally intended to be used, were dropped in here and there to even up or to fill a space, that the display might present a symmetrical appearance.

"The window had a row of electric lamps behind the long trough-shaped reflector, shown in the picture, near the ceiling. These, ordinarily, lighted the window sufficiently, but a portable lamp was placed in the fire-place to light up its recess and to throw a reflected light out and over the star display. To more evenly distribute the light, as previously stated, portables were placed on each side of the fire-place as shown. These portables had either red or yellow shades, and were lighted with strong candlepower electric bulbs, throwing a bright light down and over the star and silver on the right and over the carvers and steel goods on the left. The long reflector at the ceiling was turned to throw light on the goods on the red background and down on the red and yellow shades below. This arrangement produced a flood of blended red, white and yellow light altogether pleasing. The evening effect was remarkable. The bright tinted light danced and sparkled on polished steel and glistening silver, amounting to an illumination almost of gorgeous splendor.

"Crowds gathered night after night and day after day to examine the display and to obtain a souvenir, or, as custom has dictated at Christmas time, to purchase little presents for their friends. The display was a great success from every point of view."

SNAP HOSE COUPLING OF STUBER & KUCK, PEORIA, ILL.

Stuber & Kuck, Peoria, Ill., are calling the attention of the trade to their Snap Hose Coupling, the individual parts of which are here illustrated. The manufacturers state that this coupling, which has been on the market for three years, has had a very successful run. They are separate fixtures, as the nozzle and sprinkler are separate, and they are inserted at any joint where a quick and easy connection is desired. When the old hose is worn out, they are ready for the



Parts of Stuber & Kuck's Snap Hose Coupling.

new. The makers say that they pay for themselves by making it easy to uncouple the hose and place it in shelter. Stuber & Kuck's Snap Hose Coupling is declared to save time, hose and temper. Owing to the fact that it swivels, kinking of the hose is prevented. It is said to do away entirely with all the trouble and annoyance that is had with the old style coupling. When writing Stuber & Kuck, kindly mention THE AMERICAN ARTISAN.

THE PITTSBURG CONVENTIONS.

One of the most important conventions of the year will be that of the American Hardware Manufacturers' Association and the Southern Hardware Jobbers' Association, to be held in Pittsburg jointly, on June 9, 10 and 11, under the auspices of the Pittsburg membership of both organizations. The convention will discuss matters of immediate importance to the hardware and jobbing interests of the country, and the list of speakers and special papers is most imposing. There will be more than 500 in attendance, the Southern representation being especially strong. One of the purposes of the joint convention is to bring manufacturer and jobber into closer relationship, and one of the first effects will undoubtedly be manifested in renewed activity in all lines of hardware manufacture.

The great manufacturing industries of the Pittsburg district are taking the liveliest interest in the convention, and will assist in every way to make it a notable occasion, as most of the raw materials consumed in the hardware trade are turned out in the great mills which line the rivers there for miles. On the Pittsburg entertainment committee are such men as A. C. Dinkey, president of the Carnegie Steel Company;

B. F. Jones, Jr., president of the Jones & Laughlin Steel Company; Wallace H. Rowe, president of the Pittsburg Steel Company; Lawrence Dilworth, president Dilworth, Porter & Co., and the general officers of a half dozen other big steel and iron companies.

Among the entertainment features of the convention will be smokers, dances, musicales, banquets, trolley trips around the principal steel and iron works, and special entertainments such as teas, band concerts and receptions for the wives and lady friends of delegates to the convention. Automobiles and taxicabs have been provided for the use of delegates without charge, and Pittsburg wealth and industrial influence are outdoing themselves to make this the most notable convention in the history of either association. It will be an occasion of special interest to the Southern hardware men and their friends, as the convention is planned especially for them, and every form of hospitality is being devised with their comfort and entertainment in view.

Pittsburg will be especially interesting to the visiting delegates, as it is the industrial center of the nation, having more than 5,000 manufacturing establishments, employing 358,000 men, turning out an annual product of $750,000,000, representing an investment of a round billion, with a weekly payroll of $1,000,000. The annual tonnage of the Pittsburg district equals 10 per cent of the tonnage of the entire country, including all freight carried annually by rail, river and lake. The capital and surplus of banks in the Pittsburg district represent one-fifteenth of the total capital and surplus of all the banks in the United States, being the second city in the United States in banking capital and surplus.

THE "DIME" SCREEN DOOR CHECK.

The accompanying illustration represents the "Dime" Screen Door Check, which has been put on the market by the Caldwell Mfg. Co., 41 Jones St., Rochester, N. Y. It stops the slamming of the screen door and thus obviates a very common annoyance. The manufacturers state that hardware stores in all sections of the country are finding it to be a ready seller, besides yielding them a substantial profit. A descriptive circular and prices will be forwarded upon application. When writing the Caldwell Mfg. Co., kindly mention THE AMERICAN ARTISAN.

"Dime" Screen Door Check.

THE 'ELECTRA' LIGHTNING DEMONSTRATING MACHINE.

The "Electra" Lightning Rod Co., Cresco, Iowa, are distributing a circular illustrating the "Electra" Lightning Demonstrating Machine which is intended to prove the true theory of the lightning rod. The company states that the most skeptical agree with its teachings. It shows how buildings are struck by lightning, how live stock is killed in the field by lightning, and how all danger from lightning may be avoided. The machine is easily handled and operated. It is 14 inches high, 19 inches long, 7 inches wide, and weighs 20 pounds. When writing the "Electra" Lightning Rod Co., kindly mention THE AMERICAN ARTISAN.

ONE OF THE TAYLOR & BOGGIS FOUNDRY CO'S. LATEST DESIGNS.

The Taylor & Boggis Foundry Co., Cleveland, Ohio, report an increasing demand for their extensive line of light gray iron castings. The accompanying illustration shows one of the company's latest designs in builders' hardware, which, they state, has come into general popularity with the trade. Besides builders' hardware, the company's line includes dampers and damper clips, oil and gas stoves, furnace lamps, molasses gates, letter boxes and various hardware specialties. The Taylor & Boggis Foundry Co. announce that they will have an exhibit at the Cleveland Industrial Exposition which will be held in that city on June 17 to 19 inclusive, where they invite inspection of their goods by all those who may attend the exposition. When writing The Taylor & Boggis Foundry Co., kindly mention THE AMERICAN ARTISAN.

New Design of The Taylor & Boggis Foundry Co.

TO COOK ANY FOOD IN ANY VESSEL WITH ONE KETTLE.

J. Marsh, "The Briars," Upminster, England, announces the invention of an apparatus which will cook any food in any vessel with one kettle. In his advertisement in this issue he says: "If you want all the profits on this in America write now to J. Marsh, 'The Briars,' Upminster, England." When doing so, kindly mention THE AMERICAN ARTISAN.

A VERY HANDSOME CALENDAR.

Iwan Bros., South Bend, Ind., manufacturers of hardware specialties, are distributing a very handsome calendar, measuring 16x23½ inches. The picture is known as "The Favorite" and is reproduced by color photography from an original painting by J. Ross Bryson. It is a striking and popular picture, embodying many of the qualities for which the artist is famous. The brilliant red dress and hat, the black plume standing in bold relief against the white mane of the horse, and the delicate flesh tints of the fair equestrienne combine to make a very effective subject. After a brisk morning canter, during which he has behaved particularly well, the noble steed is receiving a lump of sugar from the hand of his devoted mistress. Whether the title of the picture refers to horse or maid is hard to guess, as it seems to be a case of reciprocal affection. Owing to the fact that Iwan Bros. are sometimes addressed at their old location at

Streator, Ill., they are distributing the calendar so that the trade by referring to it will see that they are now located at South Bend, Ind. When writing Iwan Bros. kindly mention THE AMERICAN ARTISAN.

GOOD ADVICE FOR RETAIL HARDWARE DEALERS.

Some good advice to the retail hardware trade of the country was given by President J. W. Beasley, Birmingham, of the Alabama Hardware Dealers' Association, in his annual address to the organization which held its convention at Birmingham, Ala., on May 13 and 14. In the course of his remarks, Mr. Beasley said:

"If every hardware dealer in the country were to unite with the existing association in his state, attend the meetings thereof, and use every means in his power to advance the interests of his association, some of the results would be: Deep waterways, fourteen feet to the Gulf; good roads in every state with consequently increased trade; no more demoralizing price-cutting; equitable express and freight rates to all points; better kept stores; improved methods of advertising; advanced systems of conducting business; more dealers doing business on a cash basis; a better feeling existing between dealers; fewer jealousies and more general business relations all around.

"I very strongly recommend and would urge the organizing of local or district associations. There are always local conditions obtaining and local problems arising over which dealers beyond the district have positively no control and must be met by the dealers directly affected. Get together, brethren, discuss the local problems; you will arrive at a satisfactory solution of them, which will not only result in a pleasant, friendly relation between competitors but will show profitable results in such tangible form that it can be counted in the cash drawer."

READY-MADE LAWN MOWER ADVERTISEMENTS FOR THE DEALER.

The Supplee Hardware Co., Philadelphia, Pa., have recently issued a booklet showing the newspaper cuts which they furnish free to dealers who carry the famous "Pennsylvania" line of lawn mowers. The booklet illustrates a number of new and striking designs of ready-made "Pennsylvania" lawn mower ads. For advertisements lettered in the booklet from "A to N," inclusive, the Supplee Hardware Co. furnish electrotypes of cuts only. These ads carry instructions on the back or side and may be clipped separately from the book and given by the dealer to his local newspaper along with the electro. The dealer can, of course, change the copy to suit his requirements, and the advertisement may be made to occupy larger or smaller space, as desired, or used as a portion of a big announcement. Advertisements numbered from "1 to 11," inclusive, include the type matter as part of the electro. The Supplee Hardware Co. state that these advertisements appearing in the dealer's local newspaper will educate the people of his community to the many advantages of the "Pennsylvania," "Pennsylvania Junior" and "Great American" Ball-bearing Mowers, and will bring prospective purchasers direct to the store. The company will gladly furnish, free of charge, electrotypes of this entire series, to be run as a continued story, merely requesting in return that the dealer mail them a copy of the paper in which each appears. The cuts are supplied to one dealer only in each city, and only to those dealers who buy from the company direct. Numerous talking points on the subject of "Pennsylvania" lawn mowers, for the use of the retail salesman, are given in the booklet. When writing the Supplee Hardware Co., kindly mention THE AMERICAN ARTISAN.

RETAIL HARDWARE DOINGS.

NEW FIRMS AND CORPORATIONS.

Houston, Tex.—The Brand-Lyles Hardware Co. has been incorporated with a capital stock of $25,000 by R. E. Brand and J. L. Smith.

Mena, Ark.—The Watkins Hardware Co. has been incorporated with a capital stock of $25,000. The incorporators are: D. M. Watkins, president; W. E. Watkins, vice-president, and M. P. Olney, secretary-treasurer.

Chisholm, Minn.—Matt Dorin expects to open a hardware store here soon.

Aspermont, Tex.—The Riter Hardware & Implement Co. has been incorporated with a capital stock of $10,000.

North English, Ia.—E. W. Patterson has purchased a hardware store in this city.

Erie, Pa.—The Waterford Hardware Co. has opened a new store in the Bryant Building with W. J. Hill as manager.

BUSINESS CHANGES.

Fremont, Neb.—J. S. Hanzl & Co. have disposed of their hardware stock to Edward Toborsky of Howell.

Mt. Hope, Wis.—Jas. Hayde has sold his hardware establishment and will move to Prairie Du Chien, where he will probably engage in the same business.

Manhattan, Ill.—C. K. Smalley has sold his interest in the hardware firm of Smalley & Lichtenwalter.

Wettenberg, Wis.—U. A. Cheeseman and Henry Meyer have dissolved partnership, Mr. Cheeseman buying out Mr. Meyer's shares in the business.

Brush, Colo.—The hardware and furniture stock of Heinzeman & Wallace was recently purchased by Geo. Barr & Sons of Pleasanton, Kans.

Ft. Smith, Ark.—The Yantis Hardware Co. has changed its name to the Yantis-Rogers Hardware Co., and increased its capital stock from $15,000 to $25,000.

Memphis, Tenn.—Orgill Bros. & Co. will separate their wholesale and retail department on June 1. The retail department will be incorporated under the name of the De Soto Hardware Co.

MISCELLANEOUS.

Brush, Colo.—W. H. Turpin and John Schuller recently formed a partnership and have engaged in the tinning and plumbing business.

Denver, Ia.—C. C. Judas is building an addition to his hardware store.

Kinderhook, Ill.—George Burrough's tinshop suffered a loss by fire.

Indianapolis, Ind.—Matthew Bros. have recently opened a tinshop at 944 Hamilton avenue, and solicit catalogues from all manufacturers of warm-air furnaces.

Brush, Colo.—F. M. Crain, who has been connected with the hardware firm of A. Duenweg for several years, is now conducting a heating and plumbing business.

Vinton, Ia.—Arthur M. Rowe, hardware merchant, is reported in bankruptcy.

The failure of the merchant who keeps a dirty, sloppy store in the indolent, shiftless way, means a "ten strike" for progress.

Advertising Department

Our readers are invited to send in copies of their advertisements in the local press for criticism. All communications should be addressed to the "Advertising Department" of THE AMERICAN ARTISAN.

The general publicity announcement of the Griffin Hardware Co. of Griffin, Ga., is practically devoid of faulty features. Better type could scarcely have been used and the ad could not have been laid out to better advantage. There is scarcely any reason, however, why the company's name at the bottom of the ad should appear in type differing in style from that used at the top. Too many styles of type in an advertisement have a tendency to lessen its prominence. The

Griffin Hardware Co.

HEADQUARTERS FOR

General Hardware,
Stoves and Ranges,
Agricultural Implements,
&c., &c.

GRIFFIN HARDWARE CO.

Griffin, Georgia.

ad appeared in the *Griffin* (Ga.) *News*, and occupied 4¼ inches of space, double column width.

* * *

The advertisement of the Wilcox Hardware Company of Adrian, Mich., is, on the whole, a fairly good one, though it looks a bit crowded. Had smaller type been used the ad would stand out much better. The top and bottom lines look well, but there is not enough contrast between the first, and the second and third lines. The display heading in an advertisement should stand out prominently over that part of the ad following it, and by reason of the bold-face type used in the second and third lines the heading in this case is somewhat obscured. There is a ridiculous typographical error in the sixth line, the second half of the word "Enamelware" being spelt "wear." This should have been caught in the proofreading. In other respects the ad is a satisfactory one. It appeared in the *Adrian* (Mich.) *Daily Telegram* and occupied the same space that it does here.

* * *

The advertisement of G. W. Niswander & Co., of Parkersburg, W. Va., as will be observed, is an announcement of spring goods. It does not possess any features of more than ordinary significance, while there is cause for adverse criticism in the fact that too much matter has been used in the body of the ad and condensed so that it somewhat resembles a news item. It appeared in the *Parkersburg* (W. Va.) *Sentinel* and took up the same amount of space that it does here.

Good for Spring Use

Clover, Red Top, Blue Grass, Timothy and Lawn Grass Seeds, all kinds Garden Seeds. Oliver Chilled Plows and Points, and Repairs for all kinds of Plows; Garden Rakes, Hoes and Garden Plows. Lime, Lehigh Port Cement, Plaster and Builders Supplies. Stoves, Coal and Gas Ranges, at prices that will get your business. Call on

G. W. Niswander & Co.

Hardware

230 South Side Court Square.

PAINT YOUR HOUSE THIS SPRING

Use LOWE BROS.' High Standard Paint Exterior and Interior.
A Full Line of Stains, Varnishes and Floor Finishings.

DUST-LESS---The original sweeping compound sold only by us in bulk—no charge for packages.

TILENE---For cleaning Enamelwear, Bath Tubs and Lavatories sold in bulk.

See Our Great Line of Bath Room Fixtures.

WILCOX HARDWARE COMPANY

Heating and Ventilating

"SUPERIOR" FURNACES OF THE UTICA HEATER COMPANY.

The Utica Heater Co., Utica, N. Y., state that their "Superior" Furnaces have been used so extensively and with such uniform success that they are now generally recognized as embodying the high quality of merit indicated by their name. From year to year new types of furnaces have been added until the company thinks that the "Superior" line is as complete as any offered the trade. They call special attention to the additions made to their line in the "Superior" Sanitary Air Warmer, the "Superior" 300 Series, and the "Superior" 1100 and 1200 Series, all of which, the company states, have met with marked success since their introduction. The Utica Heater Co. say that it is their constant effort to protect their customers' interests and to co-operate with them in every possible way in increasing their sales of the company's goods. When writing for catalogue, kindly mention THE AMERICAN ARTISAN.

The "Superior" Furnace.

LAUNDRY AND TANK HEATERS OF KELLOGG-MACKAY CO.

Kellogg-Mackay Company, Chicago, are distributing a hanger card illustrating and describing their "Klymax" laundry heaters; "Improved Giant" water and tank heaters; "Little Giant" tank heaters, and "Giant" laundry heaters. All of these heaters are adapted for hard or soft coal, but the "Improved Giant" water and tank heaters will burn all kinds of fuel. They are said to be economical, durable and efficient. While "Klymax" laundry heaters are intended to be used for heating irons, the top can be used for cooking. The four-part graduated cover on the No. 10, placed in the center of the top, is to receive sunk-bottom pots or kettles of various sizes. "Giant" laundry heaters are provided with large flat top, very convenient for heating water or for light cooking. When writing Kellogg-Mackay Co. for prices, kindly mention THE AMERICAN ARTISAN.

THE "MAGEE EVERETT" FURNACE.

The Magee Furnace Co., 86 East Lake street, Chicago, are calling the attention of the trade to the "Magee Everett" furnace, which is a low-priced furnace made in three sizes, 19, 21 and 24-inch fire-pots. The "Magee" dock-ash grate as applied to the "Magee Everett" furnace is durable in construction and possesses great heat-resisting qualities. The grate is a very important feature of a furnace. Its size must be carefully proportioned to the space in the fire-pot, combustion chamber, and flues, in order to secure fuel economy. It must operate easily and effectually dispose of collected ashes and cinders with a minimum of physical effort, maintaining a bright fire continually. It must be simple and durable, with bars easily removed and replaced. The Magee Furnace Co. state that all these features are present in the "Magee" dock-ash grate which is used in the "Magee Everett" furnace. When writing the Magee Furnace Co., kindly mention THE AMERICAN ARTISAN.

THE "NIAGARA" FURNACE.

The Forest City Foundry and Mfg. Co., Cleveland, Ohio, are calling the attention of the trade to their "Niagara" furnace, made entirely of cast iron. This furnace, they state, is strictly modern and up-to-date. It has a deep and roomy ash-pit, and the grate is of the triangular bar dumping type. The two-piece fire-pot is corrugated and has deep cup joints. The "Niagara" furnace is equipped with dust flue, and has large, well-fitting doors and ornamental shield front. When writing the Forest City Foundry and Mfg. Co. for catalogue, kindly mention THE AMERICAN ARTISAN.

CATALOGUE OF THE KRUSE & DEWENTER CO.

The Kruse & Dewenter Co., 427-429 E. Washington Street, Indianapolis, Ind., manufacturers of steel and cast-iron warm-air furnaces, are distributing a catalogue in which their extensive line of furnaces is very fully described. Upon glancing over the illustrations in the book it will be readily seen that the apparatus contain a large prime heating surface, with an equal distribution of heat over the entire area. The entire surface is exposed to the direct action of the fire. The Kruse & Dewenter Co.'s steel furnaces are constructed with lapped and flanged joints, making them absolutely gas-tight. At the rear of some of these furnaces are attached radiators, which take up the heat from the hot gases that are usually lost in the smoke flue. In the cast-iron furnaces the joints are made tight by a complete system of mechanical construction. The parts exposed to the greatest action of the fire are made heavy and durable. Great care has been exercised to secure proper allowance for expansion and contraction. It will be noticed by referring to the cuts in the catalogue that all the Kruse & Dewenter Co.'s furnaces are designed without soot-collecting tubes and are therefore practically self-cleaning. The furnaces for burning soft coal have a special device for admitting air at the top of the fire to mix with the carbon gases, which assists the combustion of coal. The furnaces are of different designs to meet the conditions and requirements of the kind and size of the building to be heated. Under separate headings in the catalogue each furnace is described, together with the dimensions and approximate heating capacity. When writing the Kruse & Dewenter Co. for catalogue, kindly mention THE AMERICAN ARTISAN.

The Waterman-Waterbury Co. of Buffalo, Buffalo, N. Y., has been incorporated with a capital stock of $300,000 to manufacture heating and ventilating systems. The incorporators are: Peter L. Pease, John T. Gething and Frank B. Watertown, all of Buffalo.

Tinshop

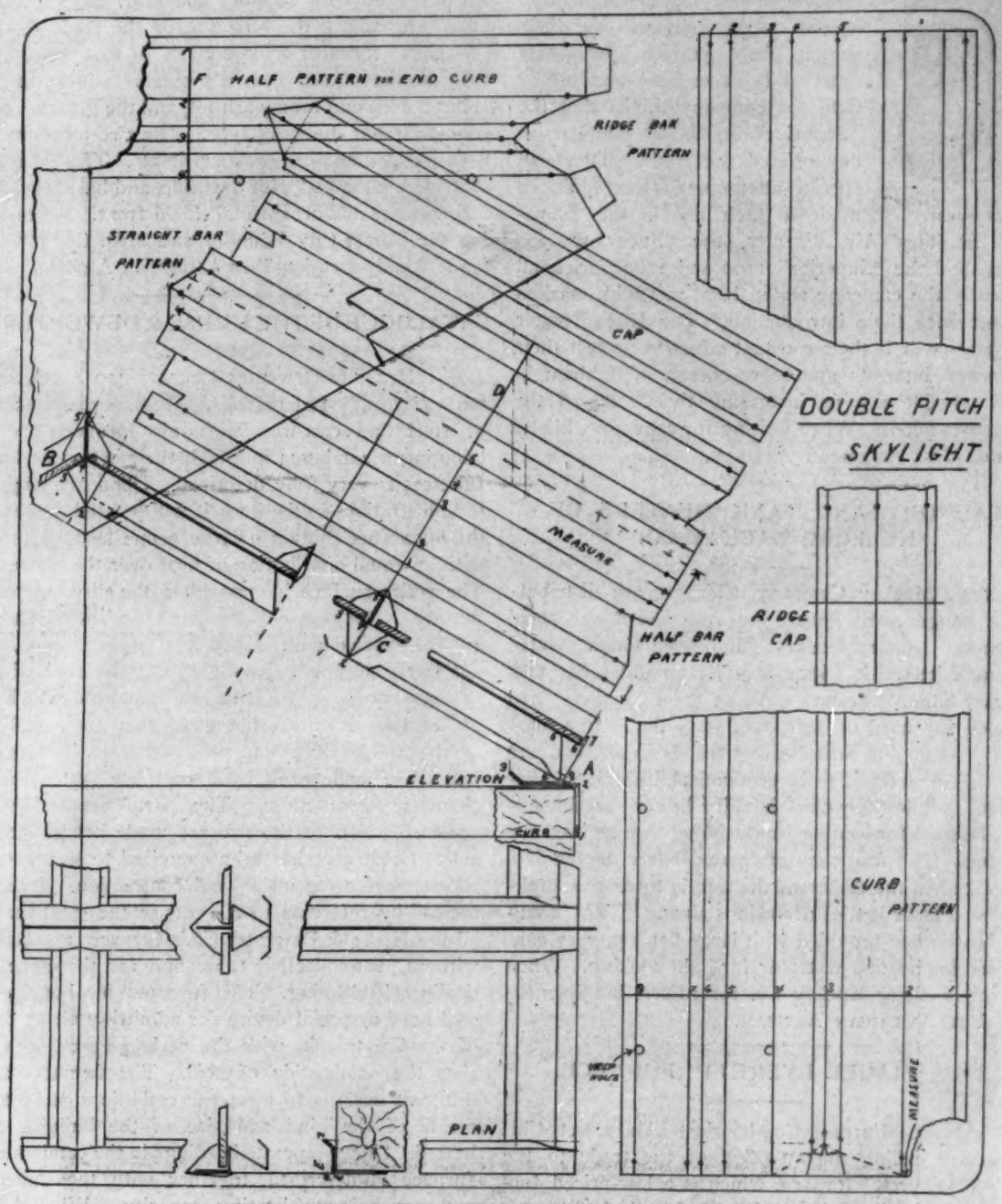
A DOUBLE PITCH SKYLIGHT.

BY W. E. OSBORNE.

To THE AMERICAN ARTISAN:

Some time ago a correspondent of your paper asked for information that would aid him in laying out a pattern for skylight bars of different pitches, the bars needed being for a gable-end skylight.

To obtain accurate patterns for this style of skylight, it is necessary to make full size detail drawings of same and full size patterns. First draw profile of curb *A*, ridge bar *B* and center bar *C*; numbering each bend as shown; in profile *A*, draw point *6* on a line with *1* and *2* as this brings your glass line on the same line as the curb; and the measuring point on the bar patterns at the end of pattern as shown. To draw pattern for straight bar, draw stretchout line *D* and place on this line all the points from profile *C*, then draw lines through these points parallel to elevation of bar; then where bar intersects profile *A*, draw lines to pattern as shown; and also from ridge bar. Now draw curb pattern, taking the points from profile *A* and placing on stretchout line. For pattern for end of skylight, we have a half bar with a hemmed edge to connect over end curb *E*; to draw pattern, take points from profile *E* and place on stretchout line *F*. Draw lines through these points where this curb intersects with gutter of curb *A*; draw lines to pattern. For pattern for ridge bar, take spaces from profile *B* and place as shown, in pattern; the ridge bar to be the same length as curb *A*. This skylight is drawn to a pitch of 7-inch rise in one foot or 30 degrees. For



Patterns for Double Pitch Skylight.

any other degree draw the same; after patterns are complete, it is only necessary to know the size light wanted, make curb measures ½-inch longer, so as to have ¼-inch all around; and to find the length of straight bar, lay out half the width of light and draw a right-angled triangle to 30 degrees pitch; measure the slant line and make your bars this length.

A PRACTICAL EXEMPLIFICATION OF THE SUPERIORITY OF SHEET METAL ROOFING.

A practical illustration of the lasting qualities of sheet metal roofing and how it can be relied upon to furnish protection to whatever material may lie beneath it which may not have been consumed in the event of fire having attacked the building housing it, is here shown. In this instance the building was that of the Norfolk Veneer Co. of Norfolk, Va., which was covered with high-grade sheet iron, No. 28 gauge. The illustrations, here reproduced, were furnished THE AMERICAN ARTISAN through the kindness of W. H. Barnard of W. H. Barnard & Co., Norfolk, Va., former secretary of the National Association of Master Sheet Metal Workers. As is well known, Mr. Barnard is one of the most active exponents of the indispensable use of sheet metal in building construction, and there are few men who are better qualified to pass upon the merits of sheet metal roofing, etc., than he.

The building occupied by the Norfolk Veneer Co. which recently fell prey to the fire fiend, measured about 100 x 300 feet. It is stated that there was a considerable amount of salvage of machinery from the fire, which unquestionably there would not have been had not the building been provided with a sheet metal roof. Mr. Barnard advises that everything in the building would have been entirely consumed had the roof been of tar and gravel.

Site of Building of Norfolk (Va.) Veneer Co. Recently Destroyed by Fire. The Illustration Shows the Sheet Metal Roofing Protecting the Machinery Under It After the Building Had Collapsed.

Another View of the Protection Afforded the Machinery by the Sheet Metal Roof.

A case of this kind should lend strength to the contention of the National Association of Master Sheet

Metal Workers that gravel and tar and other roofing material of that character should carry a heavier rate of fire insurance than metal roofing. Apart from the fact that metal roofs possess fire-resisting properties, their value is further enhanced by their lightness in weight.

The fire-resisting qualities of roofing material are not only measured by the resistance of the roofing to flames on one side, but by the flash hazard on the other side. A prepared roofing that is attacked by fire from the outside of the building may not ignite for several minutes. A spark, however, may fly underneath this roof, and the roof being subjected to outside heat, volatile gas underneath it would be set free which would burst into flames from any flash spark attacking the reverse side of the roof. An inflammable roof would have little chance for existence in such a contingency. Note from the illustrations how well a metal roof would withstand the presence of fire beneath it. Tin roofing, especially when laid with a deadening felt and asbestos under it, does not set free any volatile gas under the influence of heat, the consequence being the practical elimination of the flash hazard, on the absence of which insurance authorities lay particular stress. It is evident, therefore, that tin roofing laid in accordance with this specification has a greater resistance to heat from either side, and is free from the flash hazard on the reverse side.

Illustration Showing a Portion of the Metal Roof Inverted by the Fire, but Yet Intact. The Dots Show the Cleats.

Whatever merit other roofing substances and construction may have, there always has been and always will be a large field for metal roofing.

The suggestion has been advanced by the insurance interests that a roof should be mechanically so put together that if the underlying support is removed, it will still span the opening even after the solder, if solder has been used in this construction, has been melted out. A tin roof so constructed that it will keep the opening covered even after there is sufficient heat to burn out its support, prevents the spread of fire because it leaves no vertical opening. The illustrations herewith bear ample testimony to this fact, and show how completely the area occupied by the

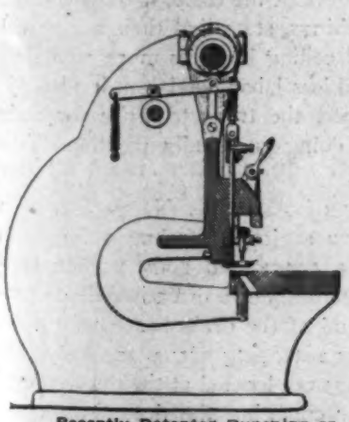
A Section of the Inverted Metal Roof. The Space Indicated by "X X" Shows a Few Breaks in the Standing Seams.

building was covered by the metal roof after the walls of the building collapsed, thus giving protection to property beneath it. On the other hand, any prepared roofing when exposed a certain length of time is bound to burn through and cannot possibly prevent the creation of a vertical opening. All fire insurance rules prohibit vertical openings in buildings for the reason that they are the natural path of flames wherever they exist. From a fire insurance stand-point, therefore, a metallic roof is of great importance in restraining the progress of fire.

This Picture Shows How the Roof Was Left by the Fire and Wind, and How It Afforded Protection From Water to Whatever Was Beneath It.

A NEW PUNCHING OR SHEARING MACHINE.

United States Patent No. 921,068 was on May 11 granted to Chas. A. Bertsch, Hermann Schelhammer and Lawrence H. Bertsch of Cambridge City, Ind., on a punching or shearing machine, shown in the accompanying illustration. The patent has been assigned to Bertsch & Co., Cambridge City, Ind., manufacturers of sheet metal working machinery. The machine comprises a vertically reciprocating gate to carry the operating tool or tools, an upper shear-blade carried by the gate, a punch-bar secured to the front of the gate, a series of punches fitted to slide vertically in the punch-bar, and a pressure-bar lying over the upper ends of the punches. A gag-bar engaging under a projection on the gate is adapted for transverse shifting from a position over the pressure-bar to a position not over the pressure-bar. Springs are connected with the pressure-bar which serve to co-operate with the weight of the bar in depressing the bar and punches. When writing Bertsch & Co., kindly mention THE AMERICAN ARTISAN.



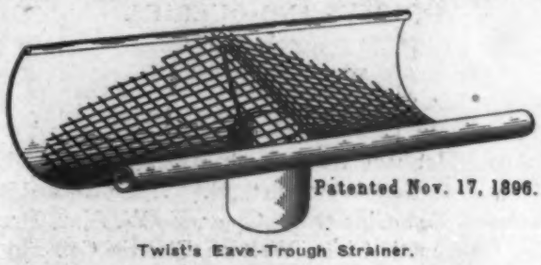
Recently Patented Punching or Shearing Machine.

PRODUCTS OF THE LA CROSSE STEEL ROOFING & CORRUGATING CO.

The La Crosse Steel Roofing & Corrugating Co., La Crosse, Wis., requests the trade to write for their catalogue which illustrates and describes the company's line of steel ceilings, cornices, skylights, roofings and sidings, eaves-trough, conductor pipe, cut-offs, miters, end and drops. The company advise that quick shipments are their specialty and that they are better prepared than ever to care for the wants of the trade for the goods mentioned. When writing the La Crosse Steel Roofing and Corrugating Co., kindly mention THE AMERICAN ARTISAN.

TWIST'S EAVE-TROUGH STRAINER.

The accompanying illustration shows Twist's Eave-Trough Strainer, said by the Coldwater Specialty Mfg. Co., 134 Lake street, Chicago, to be the most complete strainer now on the market. It is made of galvanized meshed fabric or wire screen, and is of anti-clinal form, that is, it comprises alternately dipping or downwardly sloping portions, which at the center form a crest or ridge. From this central point the strainer slopes downward in opposite directions and extends longitudinally in the trough on each side of the down spout, until the ends of the strainer rest in contact with the base of the trough. It is so constructed that it may be readily applied over the down



Twist's Eave-Trough Strainer.

spout, and will be equally effective whether the down spout communicates with the eave-trough at one end or at a point intermediate the ends. Twist's Eave-Trough Strainer is adapted to prevent leaves, twigs, etc., from entering the down spout and to conduct the refuse to the level of the edges of the trough, whereby the refuse may be carried by the force of the water over the edge of the trough, thus rendering the trough self-cleaning. There is nothing about it to rust or get out of repair. When writing the Coldwater Specialty Mfg. Co. for prices, kindly mention THE AMERICAN ARTISAN.

THE "BURT" VENTILATOR.

The "Burt" Ventilator made by The Burt Mfg. Co., Akron, Ohio, is so constructed that when most needed—which is during perfectly calm weather—the ventilator will be effective in drawing the impure air from the interior of the building. Any movement of the outer air across the top of the "Burt" causes an upward flow of air in the air tube and the air that is next to the ceiling, the hottest in the building, is drawn out. The "Burt" ventilator prevents any back current of air and does not become clogged with snow, ice or other substance, but is said always to remain free and open. It is stationary and immovable and is guaranteed not to get out of order, to require no attention and to be perfectly noiseless. It is simple in construction and highly ornamental. One of the most important characteristics of the "Burt" glass-top ventilator is that it constitutes both a skylight and a ventilator. The manufacturers state that in most cases this makes unnecessary any other form of skylight. Owing to the condition of the weather, it is sometimes advisable to close a ventilator, in which case the "Burt" can be entirely closed without in the slightest degree obstructing the passage of daylight through it. The damper of the "Burt" ventilator is so constructed that the air-shaft always remains free and unobstructed, whether the ventilator is closed or not. The "Burt" is manufactured in any size required. When writing The Burt Mfg. Co. for descriptive booklet, kindly mention THE AMERICAN ARTISAN.

NOTES AND QUERIES.

FIRE ALARM BELLS.

From W. Libal, Lena, Wis.

Where can I buy fire alarm bells?

Ans.—McShane Bell Foundry Co., Baltimore, Md.; Meneely & Co., Watervliet, N. Y.; Cincinnati Bell Foundry Co., Cincinnati, Ohio; E. W. Van Duzen Co., Cincinnati, Ohio; Western Electric Co., 259 S. Clinton St., Chicago.

ADDRESSES OF CLIPPING BUREAUS.

From C. N. Hooper, Dubuque, Iowa.

Can you give me the addresses of clipping bureaus?

Ans.—Consolidated Press Clipping Bureau, 162 State street, Chicago, Ill.; International Press Clipping Bureau, 378 Wabash avenue, Chicago, Ill.; Newspaper Clipping Bureau, 182 Dearborn street, Chicago, Ill.; XXth Century Press Clipping Bureau, 77 Jackson boulevard, Chicago, Ill.; U. S. Press Clipping Bureau, 209 State street, Chicago, Ill.

THE BERKLEY SYSTEM COMPANY, INC.

From Malleable Iron Range Co., Beaver Dam, Wis.

Can you give us the address of The Berkley System Co., Inc.?

Ans.—304 Chemical Bldg., St. Louis, Mo., Sioux City, Iowa, and Chicago, Illinois.

MALLEABLE IRON LIFTING LOOPS.

From Bascom & Co., Troy, New York.

Who makes malleable iron lifting loops, for riveting to stove plate patterns?

Ans.—Chicago Malleable Castings Co., 120th street and Center avenue, Chicago, Ill.

ITEMS.

The Falls City Cornice & Roofing Co., Louisville, Ky., has been incorporated with $5,000 capital stock by Wm. Daschbach, Wm. J. Denkler, Patrick Halpen and J. E. Merrick.

Robert S. Brown, president of the American Slate Co., and the most prominent operator in the slate district of Pennsylvania, died at his home in Easton, Pa., on May 15, at the age of 51 years. He was a son of the late John Brown, who was one of the most prominent men of his generation in the slate and lumber interests of the upper Lehigh Valley.

James Muir Osborn, father of L. A. Osborn of The J. M. & L. A. Osborn Co., Cleveland, Ohio, died at Cleveland on May 12, at the age of 74 years. The deceased was formerly a member of the firm of Myers, Osborn & Co., stove manufacturers of Cleveland. With his son he founded in 1891 the J. M. & L. A. Osborn Co., but owing to failing health he retired from active business some years ago.

F. O. Schoedinger, 146-148 N. Third street, Columbus, Ohio, manufacturers of the celebrated "Invincible Lock Joint" metal ceilings, state that their goods will aid to make the steel ceiling business more profitable, less furring strips and less labor making a decided advantage. They request the trade to write for their proposition. When doing so, kindly mention THE AMERICAN ARTISAN.

Louie B. Wheeler of Asheville, N. C., has been granted a patent on a sanitary attachment for drain boards, comprising a corrugated body portion conforming to the configuration of a drain board and provided at the lower end of the drain board with a depending lip or flange extending across the body portion. Clamping means are located at the upper end of the body portion for engaging the drain board.

GOT ALL THE REPLIES HE WANTED.

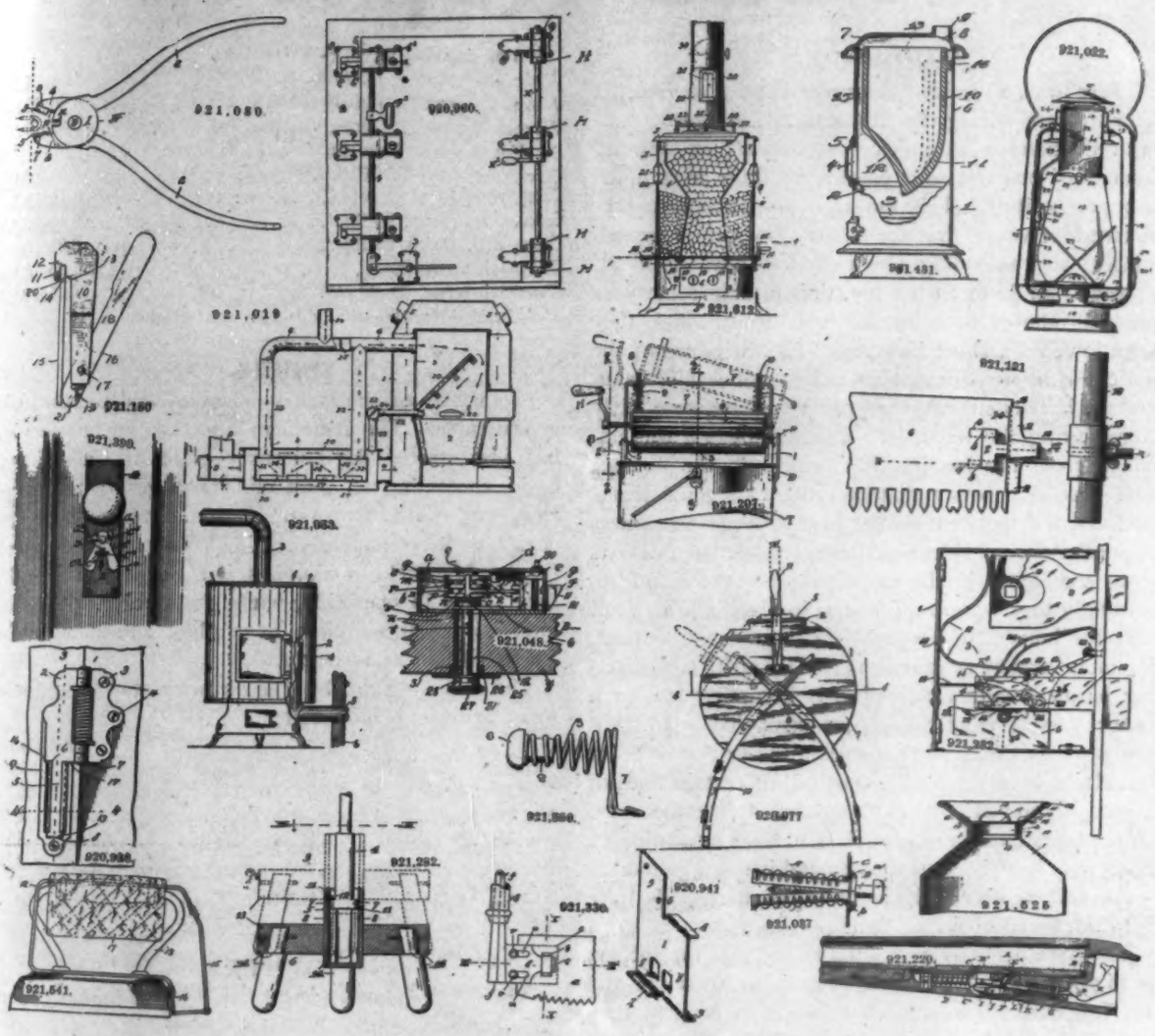
To THE AMERICAN ARTISAN:

Please discontinue my advertisement as I have received all kinds of replies. THE AMERICAN ARTISAN is surely a great paper. H. G. EDER.

La Valle, Wis., May 12, 1909.

It is not enough that you should merely satisfy demands—you must create them.

NEW PATENTS.



920,936. Detachable Hinge. William H. Eschbach, Wabash, Ind. Filed Oct. 27, 1908. Serial No. 459,772.

920,941. Carpenter's Gauge. John Filkin, Montclair, N. J. Filed Oct. 21, 1908. Serial No. 458,770.

920,960. Hinge. Francis Keil, New York, N. Y., assignor to Francis Keil & Son, New York, N. Y., a firm. Original application filed Feb. 27, 1905, Serial No. 247,588. Divided and this application filed Dec. 7, 1905. Serial No. 290,825.

920,977. Washing Machine. Frank M. Mitchell, La Grange, Ill. Filed March 9, 1908. Serial No. 419,970.

921,019. Hot Air Heating System. Robert G. Speer, St. Louis, Mo., assignor to Sarah B. Speer, St. Louis, Mo. Filed Dec. 23, 1907. Serial No. 407,635.

921,022. Cold Blast Lantern. Knut L. Stendahl, Bridgeport, Conn., assignor to The Hurwood Manufacturing Company, Incorporated, Bridgeport, Conn., a Corporation of Connecticut. Filed July 8, 1908. Serial No. 442,586.

921,033. Combined Heating and Ventilating System. Michael F. Weidenbach and Frank B. Peters, Minneapolis, Minn., assignors to Manuel-Smith Heating Company, Minneapolis, Minn., a Corporation of Minnesota. Original application filed Sept. 18, 1907. Serial No. 393,525. Divided and this application filed Dec. 23, 1907. Serial No. 407,872.

921,037. Expansion Bolt. Hiram K. Whitner, Chicago, Ill. Filed Sept. 4, 1906. Serial No. 333,085.

921,048. Lock. Leopold A. Wise, New York, N. Y. Filed Oct. 20, 1908. Serial No. 458,601.

921,080. End-Cutting Pliers. George E. Burtscher, Chicago, Ill. Filed Sept. 14, 1908. Serial No. 452,916.

921,220. Breech Loading Gun. Ansley H. Fox and George A. Horne, Philadelphia, Pa., assignors, by mesne assignments, to A. H. Fox Gun Company, a Corporation of Pennsylvania. Filed July 24, 1907. Serial No. 385,398.

921,121. Saw Handle. Ernest T. Kirkpatrick, Cora, Idaho. Filed July 9, 1907. Serial No. 382,881.

921,150. Saw Set. Walfred W. Oberg, Georgetown, Minn. Filed July 6, 1908. Serial No. 442,115.

921,207. Mop Wringer. John J. Davis, St. Louis, Mo. Filed July 2, 1908. Serial No. 441,602.

921,232. Lock. Martin Goldstein, Minneapolis, Minn., assignor of one-half to George Truscott, Minneapolis, Minn. Filed Jan. 7, 1909. Serial No. 471,083.

921,282. Washing Machine. Rudolph Rainalter, St. Joseph, Mo. Filed Mar. 31, 1908. Serial No. 424,348.

921,330. Saw. Gustav A. Zimmermann, Remscheid, Germany. Filed April 8, 1908. Serial No. 425,949.

921,390. Key Locking Device. William Finn, New York, N. Y., assignor of one-third to Lars Bendix Larsen, New York, N. Y. Filed Oct. 1, 1908. Serial No. 455,649.

921,481. Deflector for Stoves. Emanuel Stombaugh, Lima, Ohio. Filed Aug. 6, 1908. Serial No. 447,299.

921,525. Strainer for Milk Cans. Homer Edner, Dubois, Pa. Filed Nov. 27, 1908. Serial No. 464,573.

921,541. Flat Iron. John E. Harriman, Jr., Brookline, Mass. Filed March 6, 1908. Serial No. 419,475.

921,556. Door Stop. John W. Moran, Adams, Mass Filed Nov. 30, 1908. Serial No. 465,388.

921,612. Heating Stove. William H. Jones and Daniel W. Shepherd, Rupert, Idaho, assignors to Wilson Bowlby, Rupert, Idaho. Filed March 11, 1908. Serial No. 420,480.

Trade Report.

HARDWARE.

There was a decided improvement in the market for hardware during the past week. The recent radical reduction in wire prices stimulated an unusual amount of business and placed the trade in a much stronger position. This improvement became so pronounced, however, that the tendency of prices seemed upward and accordingly, wire prices have been advanced from $2 to $3 per ton, thus placing some wire products almost back on the basis from which they were lowered a short time ago. In other lines of the trade the improvement was not so noticeable, being gradual but none the less impressive. Sales were fairly large during the week, but most satisfaction was obtained from the inquiry that came into the market This was of a better character than for some weeks past and a disposition on the part of large consumers to purchase was evident. Among the smaller interests more confidence in the situation was shown and accordingly they were more liberal in placing orders not only for immediate needs but in some cases, at least, for more distant requirements. The tariff is restricting business somewhat but it is becoming less of a factor. Aside from the improvement that would follow from general trade expansion, the market is being stimulated by a seasonable demand for certain lines of goods. Trade in wire nails is more active and some large orders have been placed. Cut nails remain quiet. Barb wire is active and the demand is more general.

As will be observed the prices of wire nails have been advanced about 10 cents per keg.

The base price of wire nails at the mill for jobbers is $1.70 per keg. The base price is $1.75 at the mill for full carloads and $1.90 at the mill for less than carloads. The base price of cut nails at the mill for jobbers is $1.80 per keg. The base price is $1.85 for full carloads at the mill, and $1.90 for less than carloads at the mill.

In the Chicago market wire nails are quoted as follows: Wire nails, jobbers' car lots, $1.93; retailers' car lots, $1.98; $2.05 out of store; painted barb wire, jobbers' car lots, $1.93; retailers' car lots, $1.98, with 30 cents for galvanizing; plain wire to jobbers in car lots, $1.93, and to retailers in car lots, $1.98.

TIN PLATE.

Domestic consumers are buying tin plate freely and the mills report greater activity than for some time past. The canning interests are ordering in large quantities in anticipation of heavy fruit and vegetable crops. The leading interest has most of its serviceable mills in operation and the independents are working about 85 per cent of capacity. For 100-lb. I. C. coke plates, the price is $3.45 Pittsburg, subject to a rebate of 5 cents per box on large orders.

Quotations are as follows:

American coke tin, I. C., from store, New York:

Bessemer steel, 100 lbs., 14x20	$3.95@4.00
Bessemer steel, 95 lbs., 14x20	3.85@3.90
Bessemer steel, 90 lbs., 14x20	3.75@3.80

Am. charcoal terne, 8-lb. coating:

Worcester grades, 14x20, 107 lbs	4.05@4.10
Worcester grades, 14x20, 100 lbs	3.90@3.95
Worcester grades, 20x28, 200 lbs	7.75@7.85

For prompt shipment, f. o. b. mill:

Coke, tins, 14x20, I. C	3.60@3.65
Coke, tins, 14x20, 100 lbs	3.45@3.50
Coke, tins, 14x20, 95 lbs.	3.40@3.45
Coke, tins, 14x20, 90 lbs	3.35@3.40
Charcoal, terne, 20x28, I. C	7.05@7.10
Charcoal, terne, 20x28, 200 lbs	6.75@6.80

Usual difference for odd sizes and weights.

SHEETS.

Production of sheets has increased and the outlook is favorable. The American Sheet & Tin Plate Co. has just started the Guernsey plant at Cambridge, Ohio, containing 11 sheet mills, and giving the company 123 mills in operation. Independent sheet capacity is being increased. The National Sheet Steel Co. at Mansfield, Ohio, has put its new three-mill sheet plant in operation, while the Berger Mfg. Co. interests at Canton, Ohio, have added additional mills. Prices remain as formerly.

The following are New York prices for 500-bundle lots and over, f. o. b. mill:

Gauge.	Galvanized, Net.
No. 30	$3.55
No. 29	3.45
No. 28	3.25
No. 27	3.15
Nos. 25 to 26	2.95
Nos. 22 to 24	2.75

COPPER.

There is a quiet but steady market for ingot copper. While prices cannot be said to have been advanced materially during the past week, the market is now in a firm position. The recent large sales, estimated to have reached 150,000,000 pounds thus far this month, have placed the producers in a good position, while the fact that consumers have supplied their needs for the time being seems to insure a quiet market for the remainder of the month.

The current quotation on Lake copper is 13¼@13½c., with electrolytic held at 13⅛@13¼c., and casting brands at 12.85@13c. The London market showed considerable stability during the past week.

The European stocks of standard copper are now 51,440 tons, or a little over 115,000,000 lbs. The stocks of American copper have been increased about 160,000,000 lbs. since the first of the year, the total stocks of copper in the hands of producers, consumers and dealers at home and abroad being now about 400,000,000 lbs., without taking into account the surplus copper carried by the consumers and dealers on the continent of Europe. This fact in connection with the large monthly production, is startling, until the present increase in the domestic consumption is also taken into account.

There has been no change in sheet copper, the base price being 18c. Yellow metal is unchanged at 17c

for dimensions, 15c for sheathing and sheathing nails, 16c for slating nails and 17c for keel and stem metal.

All sizes of copper wire are steady at the new base price of 14½c.

Prices on seamless brass pipe are steady on the new basis, at 18c lb. for ¾ to 3-inch inclusive.

Extreme fluctuations for the year:

	Highest.	Lowest.
Lake	14.55	12.55
Electrolytic	14.25	12.12½
Casting	14.12½	12.00
London, spot	£64 2 6	£54 12 6
London, future	64 17 6	55 10 0
London, best selected	67 15 0	59 0 0

PIG IRON.

The pig iron market continues to show improvement, with a quiet but steady increase in the volume of iron that is going into consumption. The large sales of basic iron made recently by the Pennsylvania furnaces have served to remove the surplus iron that had previously been considered something of a menace to the market, and furnish justification for an advance in prices of 25@50c per ton. Such an advance has already been established by some of the northern furnaces, and they are getting their full asking rates.

The northern furnaces are quoting $17.50@18 ton for iron for New England delivery, and a fair amount of business is being done. The bulk of the recent sales have been for delivery in the last half of the year, this being true of Virginia and Alabama irons as well as of Pennsylvania and New York brands. At the same time, there is a fair demand for spot or early delivery, and there is a decidedly firmer tone to the market for such lots.

Some of the Virginia furnaces that have been out of the market for some time through their unwillingness to accept the going price on pig iron have now come into the market again and are soliciting business. While it cannot be said that they are cutting prices, and as a matter of fact they are asking as much as their competitors, it is true that they are asking less than they have previously been holding their iron for. As noted last week, the going price for Virginia iron is $14@14.50 ton, Roanoke, and considerable business is being done on that basis.

No new features have been developed in Alabama iron, most of the furnaces holding their product at $12 f. o. b. Birmingham. Possibly a limited tonnage could be placed slightly under this figure, but there would have to be something attractive to the furnaces to induce them to consider seriously any lower bids. The furnaces North and South have now disposed of the most of their surplus iron, and the market is considered to be in a very sound and healthy condition. Predictions of lower prices are no longer heard, but there seems to be a very hopeful feeling throughout the trade, with a steady improvement in consumption probable.

CHICAGO MARKET.

Lake Superior charcoal	$19.50@20.00
Northern foundry No. 1	16.65@17.15
Northern foundry No. 2	16.15@16.65
Northern foundry No. 3	15.65@16.15
Southern foundry No. 1	16.35@16.85
Southern foundry No. 2	15.85@16.35
Southern foundry No. 3	15.35@15.85
Southern foundry No. 4	14.85@15.35
Southern No. 1, soft	16.35@16.85
Southern No. 2, soft	15.85@16.35
Southern gray forge	13.85@14.35
Southern mottled	13.60@14.10

PITTSBURG MARKET.

Bessemer, valley	$14.75@15.00
Bessemer, Pittsburg	15.65@15.90
No. 2 foundry, Pittsburg	15.15@15.40
Gray forge, Pittsburg	14.65@14.90
Basic, valley	14.25@14.50
Basic, Pittsburg	15.15@15.40

BIRMINGHAM MARKET.

No. 1 foundry	$11.75@12.25
No. 2 foundry	11.25@11.75
No. 1 soft	11.75@12.25
No. 2 soft	11.25@11.75

Rogers, Brown & Co., Cincinnati, say in their weekly report:

"The number of actual transactions was somewhat slighter than last week, but the whole tone of things is better, the market is strong and buying is of a genuine nature.

"The presence here this week of foundrymen from all parts of the country attending the American Foundrymen's Convention, tends to make things a little quieter in reports from various districts as to sales, but the impression seems to be general that the melt is increasing among the jobbing foundries.

"It has recently been assured that shops which take care of railroad business are about to enter on a better era.

"Reports of car business placed and recent buying by car companies of pig iron go to show that this branch which has been flat for some time is on the up-grade. It would appear that this same rule will hold with the malleable companies of whom the railroads are the main patrons.

"Price advances in finished steel and wire products are reported to have apparently made no difference in the buying demand, which is a favorable omen.

"The demand lately made on some furnaces by buyers places them now in that enviable position of full order books and no desire to even consider business for extended delivery. They judged recent sales to have been of a sincere nature and were prone to help matters provided they could see their way clear to operate and furnish iron on these contracts at a slight profit over their actual cost. This attitude was largely responsible for the wide range in prices which was in evidence the last few weeks.

"Those large consumers who have been in the market recently have for the most part covered for extended deliveries, but spot buying is of so general a character that the total foots up well.

"The coke market has remained easy with excellent sales of foundry and furnace grades. During last week the production in the Connellsville district was in advance of the week before, and, while only a small percentage, it shows the increased demand made upon it by the better condition of the iron market."

Matthew Addy & Co., Cincinnati, say in their weekly report:

"There are upwards of fifteen hundred foundrymen in Cincinnati this week attending the National Convention and it has been interesting and instructive to average their business views and opinions. Their prevailing sentiment is that of hope. We have talked over the situation with scores of them. To a man they say that business with them is better. In the past four months there has been a gradual improvement, and while there is not yet much about which to brag, still the situation in many lines is good and we have not yet found a real out-and-out pessimist. All regard the future as promising. That the crops will play a great part in the business of the year is admitted by all and apparently, as far as the foundrymen can know about such things, the crops are looking well and the season though backward has been and is unusually favorable.

"There has been during the week considerable buying and there is a constant inquiry for long forward delivery. As a rule the furnaces are not inclined to sell freely at the present time. Most of them have order-books filled up on the recent buying movement and of course these orders are all at bottom prices. So the furnaces are holding back as much as they can, hoping with the general betterment and increasing melt that a little later prices will be more attractive than they are today. Of course there is no denying the fact that today's prices are not profitable and the large sales that have been made have been with the idea of starting things off and getting the volume of business back to normal. In fact the business revival so far is just about like the crops—things are pretty well planted, the ground is all right and nature should do most of the rest."

Current Hardware and Metal Prices.

THE AMERICAN ARTISAN AND HARDWARE RECORD is the only publication containing western hardware and metal prices corrected weekly.

METALS.

FIRST QUALITY BRIGHT PLATES.

		Per Box.
IC	14x20	$6 40
IX	14x20	7 45
IXX	14x20	8 60
IXXX	14x20	9 85
IXXXX	14x20	11 00
IC	20x28	13 70
IX	20x28	15 70
IXX	20x28	18 15
IXXX	20x28	20 55
IXXXX	20x28	22 95

COKE PLATES.

Cokes, 180 lbs	IC	20x28	$ 8 5
Cokes, 200 lbs	IC	20x28	9 00
Cokes, 216 lbs	IC	20x28	9 50
Cokes, 270 lbs	IX	20x28	11 25

PIG IRON.

North'n Fdy., No. 1	$17 00@$17 50
North'n Fdy., No. 2	16 50@ 17 00
North'n Fdy., No. 3	16 00@ 16 50
Southern Fdy., No. 1	16 35@ 16 85
Southern Fdy, No. 2	15 85@ 16 35
Southern Fdy., No. 3	15 35@ 15 85
Southern Fdy., No. 4	14 85@ 15 35
Southern No. 1 Soft	16 35@ 16 85
Southern No. 2 Soft	15 85@ 16 35
Southern Gray Forge	14 85@ 15 35
Southern Mottled	14 60@ 15 50
Lake Sup. Charcoal	19 50@ 20 00
Southern Silveries, 4% Silicon	17 60@ 18 10
Southern Silveries, 5% Silicon	18 10@ 18 60
Southern Silveries, 6% Silicon	18 60@ 19 10
Jackson Co. Silveries, 6 per cent	19 40@ 19 90
Jackson Co. Silveries, 8 per cent	21 40@ 21 90
Jackson Co. Silveries, 10 per cent	21 40@ 21 90
Malleable Bessemer	16 50@ 17 00
Standard Bessemer	17 40@ 17 90
Alabama Basic	16 85@ 17 35

BLACK STEEL SHEETS.

No. 12	per 100 lbs.	$2 20@$2 30
No. 14	per 100 lbs.	2 25@ 2 35
No. 16	per 100 lbs.	2 35@ 2 45
Nos. 18-20	per 100 lbs.	2 60@ 2 65
Nos. 22-24	per 100 lbs.	2 65@ 2 70
No. 26	per 100 lbs.	2 70@ 2 75
No 27	per 100 lbs.	2 75@ 2 80
No 28	per 100 lbs.	2 85@ 2 95

GALVANIZED

No. 10	per 100 lbs.	$3 05@$3 10
Nos. 12-14	per 100 lbs.	3 05@ 3 10
No. 16	per 100 lbs.	3 05@ 3 10
Nos. 18-20	per 100 lbs.	3 15@ 3 25
Nos. 22-24	per 100 lbs.	3 30@ 3 35
No. 26	per 100 lbs.	3 50@ 3 55
No. 27	per 100 lbs.	3 70@ 3 75
No. 28	per 100 lbs.	3 90@ 4 00

POLISHED SHEET STEEL.

No. 24	per 100 lbs	$4 90
No. 26	per 100 lbs.	5 00
No. 27	per 100 lbs.	5 10
No. 28	per 100 lbs.	5 20

SMOOTH STEEL.

Wood's Smooth, No. 20		$3 05
" "	No. 22-24	3 10
" "	No. 25-26	3 15
" "	No. 27	3 20
" "	No. 28	3 30

PATENT PLANISHED SHEET IRON.

Patent Planished Sheet Iron, ..."A" $10.20,"B" $9 20

PATENT PLANISHED SHEET STEEL.

Lackey Planished Sheet Steel.....8½c

SOLDER.

XXX Guaranteed ½ & ½	per lb. 18 c
Commercial ½ & ½	per lb. 17½c
No. 1 Plumbers	15½c

SHEET ZINC.

500 lb. Casks	case, per cwt. $7 15
300 lb. Casks	per cwt. 7 15
Sheets	per cwt. 7 15

COPPER.

Copper sheet, 100 lbs. over, base...17c

TIN PIGS AND BARS.

Banca, pigs, per lb	29 c
Straights, pigs, per lb	29 c
Straights in bars, per lb	33 c

LEAD.

American Pig	4.37½@4.40
Bar	4.37½@4.40
National (White) brands (in less than 100 lb lots), per lb	8½c

Sheet.

Full coils	per 100 lbs. $9 00
Cut coils	per 100 lbs. 9 50

HARDWARE.

ADZES.

Carpenters'.
Plumbs.....40%

Coopers'.
Barton's.....15%
White's.....15%

Railroad
Plumbs.....40%

Ship.
Plumbs.....40%
White's.....15%

AMMUNITION.

Caps, Percussion—per 1,000.

F. L Waterproof, 1-10s	40c
G D	35c
Musket	60c

Shells, Loaded—
Loaded with Black Powder....40%
Loaded with Smokeless Powder, medium grade.....40 & 5%
Loaded with Smokeless Powder, high grade.....40 & 10 & 10%

Union Metallic Cartridge Co.:
New Club, Black Powders.....40%
Nitro Club, Smokeless Powders, ...40 & 5%
Arrow, Smokeless Powders.... .....40 & 10 & 10%

Winchester:
Smokeless Repeater Grade..40 & 5%
Smokeless Leader Grade.40&10&10%
Black Powder.....40%

Gun Wads—per 1,000.
Winchester Gun Wads.....15%

Powder.

		Each.
DuPont's Sporting, kegs		$5 50
" "	½ kegs	2 90
" "	¼ kegs	1 60
Dupont's Sm'k'less.	50-lb. drum	22 75
" "	25-lb. kegs	11 30
" "	12½-lb. kegs.	5 80
" "	6¼-lb. kegs.	2 97
"	1-lb. cans	52

Shot.

Drop shot, sizes smaller than B, 25-lb. bags, per bag	1 95
Drop shot, B and larger sizes, 25-lb. bags, per bag	2 20
Buck Shot, 25-lb. bags, per bag	2 20
Chilled Shot, 25-lb. bags, "	2 20

ANCHORS

Expansion Screw Anchors 10%

ANVILS

Trenton, 70 to 80 lbs	9½c per lb
Trenton, 81 to 150 lbs	9½c per lb

ASBESTOS.

Board and Paper.....33⅓%

AUGURS.

Boring Machine.....70%
Irwin's.....40&10%
Carpenter's Nut.....70%
Hollow.
Bonney's—list $30.00.....75&5%
Stearns, No. 3.....36 00
Post Hole.
Digwell, 8-inch.....per doz. 12 50
Iwan's Post Hole and Well.. 40%
Vaughan's, 4 to 9-in., per doz. 6 60
Rafting.
Snell's.....50&5%
Ship.
Ford's, with or wi'out screw.40-10%
Snell's " " " 40-5%

AWLS.

Brad.

No. 3 Handled	per doz.	$0 40
No. 1050 Handled	"	90
Shouldered, assorted, 1 to 4,	per gro.	$1 20
Patent asst'd, 1 to 4	"	85
Harness.		
Common	"	95
Patent	"	90
Peg.		
Shouldered	"	1 50
Patent	"	60
Scratch.		
No 1 handled	"	4 80
No. IS, socket handled per doz.		1 25
No. 7 Stanley		1 80
Sewing.		
Common	per gro.	90
Patent	"	90

AXES.

Boy's Handled.
Lippincott, 3 lb.....per doz. $6 00
Marshall Falls City... " 5 50
Broad.
Plumbs, West, Pat..... 33⅓%
" Can. Pat..... 35%
" Firemen's (handled) .....per doz $19 00
Plumbs, Miners' (handled) " 9 00
Single Bitted (handled)
Blood's Champion $10 50
Blood's Dull Finished..... 9 00
Rough Rider..... 9 00
American..... 6 50
Perfect Premier, Forest Clipper 10 00
Duquesne 6 00
Single Bitted (without handles)
Blood's Champion $7 90
Blood's Dull Finish 8 00
Rough Rider..... 7 00
Electric Chopper 8 25
Duquesne..... 5 50
Crown 6 25
Double Bitted (without handles).
Blood's Champion, 3½ to 4½ lbs. per doz $10 00
Flint Edge " " 9 75
Perfect Premier " " 11 00
The above prices on axes of 3 to 4 lbs. are the base prices.
3½ to 4½ lbs advance 25c
4 to 5 lbs. advance 50c.
4½ to 5½ lbs. advance 75c.

BAGS, PAPER NAIL.

Pounds	10	16	20	25
Per 1,000	$2.50	3.75	4.50	5.00

BALANCES, SPRING.

Frary's	40%
Pelouze	20%

BARS. CROW.

Pinch or Wedge Point..per cwt. $3 75

BASKETS.

Clothes.

Small Willow	per doz.	$7 00
Medium "	"	8 75
Large "	"	10 50

Galvanised Iron.	½ bu.	1 bu.	1½ bu.
Per doz	$4 75	6 50	8 00

BEATERS.

Carpet. per doz.
No. 13 Tinned Spring Wire .. $0 90
No. 11 Spring Wire coppered .. 1 20
No. 10 Preston..... 1 10
Egg. Per doz.
No. 50 Imp. Dover $0 75
No. 102 " " tinned.... 85
No. 150 " " hotel..... 1 50
No. 10 Heavy hotel tinned... 2 10
No. 13 " " " ... 3 30
No. 15 " " " ... 3 60
No. 18 " " " ... 4 50

BELLOWS.

Blacksmiths'.....65%
Hand.
8-inch.....per doz. $8 50
10-inch..... " 10 50
Moulders'.
12-inch..... " 13 00

BELLS.

Call.
3-inch Nickeled Rotary Bell, Bronzed base.....per doz. $5 00
Cow.
High Grade.....60%
Kentucky.....65&10%
Door. Per doz.
New Departure Automatic... $6 00
Rotary.
3 -in. Old Copper Bell..... 4 00
3 -in. Old Copper Bell, fancy.. 6 00
3 -in. Nickeled Steel Bell..... 4 50
3½-in. Nickeled Steel Bell..... 5 00
Hand.
Hand Bells, polished.....40&10%
White Metal.....40%
Nickel Plated.....30%
Swiss.....40&33⅓%
Silver Chime.....33⅓%
Miscellaneous.
Church and School, steel alloy..50%

Farm, lbs	40	50	75	100
Each	$1.80	2.25	3.38	4.50

BEVELS, TEE

Stanley's, rosewood handle, new list.....25%
Stanley's iron handle.....25%

BINDING, OILCLOTH.

Zinc.....80%
Brass.....75%
Brass plated.....75&5%

BITS.

Auger.
Extra Double Spur.....70&10%
Ford's Car and Machine....40&10%
Ford's Ship.....40&10%
Irwin.....50%
Russell Jenning's.....25&10%
Clark's Expansive.....60%
Steer's " Small list, $22.00..25%
" " Large " $26.00 .25%
Irwin Car 50%
Ford's Ship Auger pattern Car.....40&10%
Center.....25%
Countersink.

No. 18 Wheeler's	per doz.	$1 50
No. 20 "	"	2 25
American Snail head	"	1 00
" Rose "	"	1 00
" Flat	"	80
Mayhew's Flat	"	1 10
" Snail	"	1 25

Dowell
Russell Jennings.....25&10%
Gimlet.
Standard Double Cut.....60%
German Pattern.....per doz. $0 60
German..... " 65
Gouge..... " 80
Spoon..... " 1 00
Countersink..... " 1 20
Reamer.
Jenning's Square..... " 2 50
Standard Square..... " 1 20
German Octagon..... " 75
Screw Driver.
No. 7 Common..... " 80
No. 1 Triumph..... " 1 25

BLACKING, STOVE. (See Polish).

BLADES, SAW

Butchers'.
Standard, ⅞ & 1¼-in.....40%
Clock Spring.....40%
Star.....15%
Coil.....each, $1 50

Hack.
Disston's.....25&5%
Flexible.....33⅓&5%
Star.....20&5%

Wood.
Jackson's.....per doz. $2 25
Disston's—No. 6, 16, 26 & 045.. 4 25
Triumph..... 3 50
Forest Clipper..... 3 00

BLOCKS.

Snatch.
Wooden.....60&10%
Steel.....50%

Tackle.
Iron Strapped.....70&10%
Com. Steel.....60%

BOARDS. (New List)

Slow.....50&10%

Wash.
Globe, single.....per doz. $2 50
Globe, double..... " 3 35
Memphis Globe ..... " 2 75
Crystal Glass..... " 4 00
Brass King..... " 3 75
Nickel Plate..... " 4 15

BOBS, PLUMB.

Carpenters'.
No. 2, iron.....per doz. $0 65
No. 00, " ..... " 1 30
No. 0, " ..... " 2 20
No. 3, lead..... " 2 75
No. 4, " ..... " 3 40
No. 113, brass plated.. " 1 10
No. N30, nickel plat'd. " 1 30
No. N31, " " " 1 85

BOLTS.

Carriage, Machine, etc.
Carriage, ⅝x6 and sizes smaller and shorter.....70&10%
Carriage, sizes larger and longer than ⅝x6.....60&10%
Machine, ⅝x4 add sizes smaller and shorter.....70&10%
Machine, sizes larger and longer than ⅝x⅝x4.....60&5%

Elevator.....50-10&5%
Plow.....60&10%
Stove .....80&10%
Tire.....75%
Wagon Box Strap.....70%

Mortis, Door.
Gem, iron.....60%
Gem, bronze plated.....20%

Barrel.
Cast.....60%
Wrought.....75&10%
Wrought, bronzed.....60%

Flush.
Wrought.....50&10%

Spring.
Wrought .....75&10%
Wrought, heavy.....70&10%

Square.
Cast.....50&10%
Wrought.....75&10%

BORERS.

Angular.
Miller's Falls.....per doz. $13 00

Bung.
Doz.
Enterprise Mfg. Co.'s No 1.....20%
" " " No 2.. 20%

BOXES

Mail, No..... 1 2 10
Per doz.....$3.50 5.00 17.50

Miter.
New Langdon.....15&5%
Stanley's.....30%
Seavey's.....each, $1 50

BRACES.

Barber's ..... 50&10%
Fray's Genuine Spofford's.....60%
" Nos. 66 to 146.....50%
" No. 0108..... $3 50
" No. 08..... 2 75
" No. 010..... 3 00

BRACKETS.

Hay-Rack.
Wenzelmann's No. 1, per doz. $9 00
" No. 2, " 9 00

Shelf.
Cast Iron, bronzed.....50-10&5%
Clover Wrought Steel.....70&10%
Clover Folding 70%

BROILERS.

Wire.....70%
No. Crown, Self-basting, 80dos .. $2 50

BUCKETS.

Pump, Rubber.
Wychoff.....per gro. $4 75
Cooper..... " 4 75
Champion..... " 7 50
Victor..... " 9 25
Star ..... " 5 00
IXL..... " 6 75

Well.
Galv'd Qts..... 10 12 14
Per doz.....$2.90 $3.25 $3.40
Wooden, top ear, plain, per doz. 4 00
" " swivel, " 5 10

BUCKS, SAW.

Folding.....per doz. $2 10

BURRS, RIVETING.

Copper Burrs only.....20%
Tinners' Iron Burrs only.....65&5%

BUTTS.

Cast Iron.....70&5%
Wrought Brass (New List)....40&10%
Wrought Steel, Bright.....80&10%
Wrought Steel, Japanned.
Nos. 731 and - .....70&10&10%

CALIPERS.

Double..... .25%
Inside and Outside.....35%
Wing.....30%

CALKS.

Logger's Boot.
(Lufkin R. Co.'s), per M..... $3 75

Toe.
Shoenberger.....per lb 5 c
Bessemer..... " 4½c
American..... " 7 c
Swedes..... " 8½c

CANS.

Cheese Factory.
Ontario Pattern.
Gallons..... 20 30 40
Each..... $4.25 $5.00 $6.25

Milk.
Holstein.
Nos..... 300 301 302
Gals..... 5 8 10
Per doz.....$17.50 $22.00 $25.00

Gem Pattern.
Nos..... 400 401 402
Gals..... 5 8 10
Per doz.....$17.50 $21.50 $23.50

Omega Pattern.
Nos. ..... E. 2 E. 3
Gals..... 8 10
Per dozen..... $23.50 $26.50

Jersey Pattern.
Nos..... 80 81
Gals..... 8 10
Per doz..... $23.00 $27.00

CAN OPENERS.

See Openers.

CAPS, GUN.

See Ammunition.

CARPET STRETCHERS.

See Stretchers.

CARRIERS.

Hay.
Diamond, Regular.....each, $3 85
Diamond, Sling..... " 6 50
Myers' Imperial ..... " 3 85
Myers' Clover Leaf..... " 4 00

CARTRIDGES.

See Ammunition.

CASTERS.

Standard—Ball Bearing.....50&10%
Bed.....60&5%
Common Plate.
Brass Wheel.....60&10%
Iron and porcelain wheels, new list.....00&5%
Philadelphia Plate, new list.....60%
Martin's.....60%
Payson's.....75&10%

CATCHERS, GRASS.

Carroll's, No. C.....per doz. $4 25
Wildermuth's,.
Nos..... 1 2 3
Per doz.....$5.60 $5.75 $6.25
Nos..... 4 5 6
Per doz.....$6.75 $9.50 $10.00

CHAIN AND CHAINS.

Breast Chains.
Doubleslack.....doz. pairs, $5 75
With Covert Snaps. " 5 00
With Slide..... " 3 25
Without Slide..... " 2 85

Bright Ox Chains.
⅜-in. $7.25; ½-in. $5.45 per 100 lbs.

Cable Coil Chain.
Inch..... 3/16 ¼ 5/16 ⅜
Per 100 lbs.$10.80 $8.00 $7.00 $6.20
Inch..... 7/16 ½ ⅝ ¾
Per 100 lbs.$6.00 $5.90 $5.75 $5.65
Inch..... ⅞ 1 1¼
Per 100 lbs.....$5.55 $5.55 $5.65

Cable Log Chain.
Advance 25c per 100 lb. on Cable Coil.

Cow Tie Chains.
American, 2 toggle.....50&5%
" toggle and snap...50&5%
" open and closed ring.....50&5%

Halter Chains.
American, new list.....33⅓%
German.....60%
Niagara, new list 40%
Brown's, " 40%

Picture Chains.
Light Brass, 3 ft.....per dos. $0 75
Heavy Brass, 3 ft .... " 1 30

Pump Chain
Galvanized, per 100 lbs.....$5 50

Safety Chain.
Brass.....60%

Special Steel Loading Chain.
Inch..... ⅜ 7/16 ½
Per 100 lbs.....$16.00 $13.50 $12.50

Stretcher Chains.
5/16-in. $8.50; ⅜-in. $7.75 per 100 lbs.

Tie-Out Chains.
Brown's.....70&5%

Trace Chains.
Western Standard.
6½— 6-2.....per pair 30c
6½— 8-2..... " 34c
6½— 8-3..... " 33c
6½—10-2..... " 38c
7 — 8-2..... " 38c
7 —10-2..... " 42c
7 —10-1..... " 48c
7 —10-0..... " 60c
Add 2c per pair for Hooks.
Add 2c " for Twist Link.

Wagon Stay Chains.
Inch..... ¼ 5/16 ⅜
Per 100 lbs.....$6.50 $6.00 $5.50

CHALK, CARPENTERS'.

Blue.....per gro. 75c
Red..... " 65c
White..... " 55c
Common White School Crayon..... " 10c

CHARCOAL.

In bags.....per bag 90c

CHECKS, DOOR.

Blount.....33⅓%
Sargent's.....33⅓%

CHIMNEY TOPS.

Iwan's Volcano.....50%

CHISELS.

Box.
Inches..... 10 12 14
Round per doz....$2.10 $2.25 $2.75
Flat " ... 2.85 3.60 4.20

Cold.
Good quality, ⅜ in. and larger.....per lb. .13c
Smaller size per doz.....

Socket, Framing and Firmer.
Clover.....75&10%

Tanged, Firmer.
With handles.....30&5%

Choppers, See *Cutters, Meat.*

CHUCKS, DRILL.

Goodell's, for Goodell's Screw Drivers.....per doz. $6 25
Yankee, for Yankee Screw Drivers..... 5 00

CHURNS.

Anti-Bent Wood,
Gal..... 5 7 10
Each.....$3.00 $4.60 $4.85
Belle, Barrel.....65&7½%
Common Dash, Gal. 4 5 6
Per doz..... $7.75 $8.50 $10.50
Union, Gal..... 5 7 10
Each.....$3.65 $3.90 $4.75

CLAMPS.

Adjustable.
Martin's.....30%

Carpenters'.
Steel Bar.....25%

Hose.
Sherman's, brass, ½-in., per doz.. 42c
Double brass, ½-in., " 90c

Saw Filers.
Disston's list, $30.00.....30%
Stearns', No. 0, $3.50; No. 1, $11.50; No. 3, $5.00 doz.
Wentworth's, No. 1, $6.00; No. 2 $8.10.

CLAWS, TACK.

Cast, wood hdle.....per doz.45@60c
Forged steel, wood hdle " $0.80
Solid steel..... " 1 00
Giant..... " 50

CLEANERS.

Drain.
Iwan's Adjustable.....55%
Iwan's Stationary.....40&5%

Pot.
Wire.....per doz. $0 75

Side-Walk.
Steel.....per doz. $3 25
XLCR .....65&5%

CLEAVERS

Family.
Griffin, Inch..... 6 7 8
Per doz.....$5.50 $6.75 $8.25
Royal.....per doz. 2 25

Butchers.
Plumbs.....25%

CLEVISES

Malleable .....5½c lb.

CLIPPERS.

Bolt.....$1.90@4.75

CLIPS.

Axle.....65&5%

Damper.
Standard.....per doz. 65c
Troy..... " 38c

Hame..... " 17

CLOTH

Emery.
Star.....50%
B. & A.....50%

Hardware Wire—full rolls (100 ft.)
2 to 3 incl., Galv.—in full roll... 2 75
4 and 5..... " .. 3 00
6..... " .. 3 25
7 and 8..... " .. 3 75

Screen Wire.
12 mesh, painted, per 100 sq. ft.. 1 35

COCKS AND FAUCETS.

Compression Plain Bibbs...60, 10&5%
Lever Bibb Cocks.....60, 10&5%
Compression Hose Bibbs ..50—10&5%
Telegraph Faucets (new list)..50—5%
Racking Cocks (new list)...60, 10&5%
Compression Lock C'ks(new list).70%
Andrew's Brass Faucets.....70%
Angle Plug Faucets, per doz....$0 85
Milk Can Faucets, per doz..$2.60-4.20
Petroleum Faucets .....75&5%

COLLARS, STOVE PIPE.

Inches..... 5 6 7
Plain Tin..per gro.$1.90 $2.40 $2.50
Japanned Tin " 3.00 3.00 4.25
Lacquered Brass" 3.00 5.50 4.25

COMBS, CURRY.

Nos... 000 11 15 39 89 108
Per Doz..$.37 .60 1.00 .90 1.15 .80
Nos... 299 320 390 522 620 1400
Per Doz.$1.05 .85 1.35 1.20 .75 1.40

COMPASSES.

Carpenters'.....60%
Pencil—Faber's.....per doz. $1.00

COPPER—See Metals.

COPPERS.

Soldering.
1 lb.....per lb 30c
1½ lb.....31c 2 lb... " 29c
3 lb and larger..... " 26c

CORD.

Picture
White Wire (new list) .....85&10%

Sash.
Monarch Braided Flax...per lb
Silver Lake. white. 7-32 in. "
Silver Lake, white, 8-32 in. "
Keystone.....8-32 in. " 29c

CORKSCREWS.

Humason & Beckley.....33⅓%
Walker's.....33⅓%
Williamson's Regular.....40&10%
Williamson's Forged Worm.....50%

COTTERS, SPRING.

All sizes—new list.....90&20%

COUPLINGS, HOSE.

Brass.....per doz. $1 00
Brass Plated..... " 85

COVERS, WAGON—See Tents.

CRADLES, GRAIN.

Morgan's Grapevine....per dos.$22 75

CRAYONS—See Chalk.

CROW BARS.

Inch or Wedge Point.....per lb 3¼c

CUTTERS.

Glass.
Red Devil.....45%
Smith & Hemenway Co.....50%
Woodward.....40%
Meat.
Enterprise, Nos. 5, 10, 12, 22, 32 and 42.....25%
No. 202, list, $1.50 ea.....40&7½
Pipe.
Stanwoods. No.... 1 2 3
Each.....$0.85 $1.50 $4
Slaw and Crout.
3-knife Crout.....per doz. $9 [illegible]
1-knife Slaw..... " 1 [illegible]
2-knife Slaw..... " 2 [illegible]
Washer..... " 7 [illegible]

DAMPERS, STOVE PIPE.

Jewel.....50&10%
American.....50%

DIES AND STOCKS.

Discount.....40%
King's, Little Giant.....33⅓%

DIGGERS.

Post Hole.
Acme.....per doz. $9 25
Atlas..... " 9 00
Eureka..... " 7 50
Hercules..... " 10 25
Iwan's Split Handle.. " 7 50
Iwan's Perfection.... " 9 00
Iwan's Hercules pattern " 10 00
Ryan's..... " 17 00
See also Augers—Post Hole.
Dividers, Wing.....65&10%

DOOR CHECKS—See Door.

DOORS, SCREEN.

⅞ in. 4-panel, pain ted...per doz. $7 93
1⅛ in. 4-panel, pain ted... " 9 50
1⅛ in. 3-panel, natural pine, ıancy..... " 12 40

DOOR HANGERS—See Hangers.

DRILLS.

Bit Stock.....60&10%
Blacksmith's Twist.....60%
Breast.
Fray's No. 9.....each, $1 75
Millers Falls No. 12..... " 2 10
Hand.
Goodell's Automatic.
Nos..... 01 03 3 20
Per doz.. $7.75 $12 50 $12.50 $11.00
Goodell's Single Gear. per doz. 15 75
Millers' Falls " " " 12 75
" " Double " " 15 25
Reciprocating.
Goodell's.....per doz. 16 50
Bit Stock.
Standard List..60&5%@60%@10

DRIVERS, SCREW.

Standard.....65&10%
Lock Ferrule.....60%
Champion.....40&10%
Champion Pattern.....70%
Clark's Interchangeable.....30%
Edison.....60%
Reed's Lightning.....45&5%
Goodell's Spiral.....50, 10, 5&2½%
Yankee Ratchet 50%
" " Spiral.....50&10%
Smith & Hemenway Co.....40&5%

EAVES TROUGH, GALVANIZED.

Terms, 2% for cash. Factory shipments generally delivered.

See also conductor pipe and elbows.

EGG BEATERS—See Beaters.

ELBOWS.

Adjustable Stove.
Inches..... 5 6 7
Smooth, per doz...$0.75 $0.85 $1.20
Plan'd, " 1.80 2.00 2.65
Corrugated Conductor.
Discount.....75&10%
Corrugated Stove.
Inches..... 5 6 7
Smooth, per doz..$0.85 $1.00 $1.50
Pol'd, " .. 1.40 1.65 2.25
Plan'd, " .. 2.15 2.65 3.40
Four-Piece Stove.
Inches..... 5 6 7
Smooth, per doz..$0.60 $0.35 $0.95
Planished, " .. 1.40 1 70 2.30

EMERY CLOTH—See Cloth.

EMERY TURKISH.

Size .....5-lb. pkgs. ½ kegs. kegs.
No 60 to 150, per lb.. 6c 4c 4c
Flour..... " ... 5c 3c 3c

ENAMEL, IRON.

A-B Iron Enamel, 3 doz. case, ...per gro., 15 00
Peerless..... 1 25

EXTRACTORS, PIG.

See Forceps, Pig

EYES.

Bright Wire Screw—See Goods, B. W.
Drifting Pick.....60, 10&5%
Hooks and—
Brass.....50&10%
Iron.....70%

FASTENERS, STORM SASH.

Schroeder's.....per doz. $0.85
Sensible..... " 1 15

FAUCETS—See Cocks.

FILES AND RASPS.

Delta.....70&10%

FLUE STOPPERS—See Stoppers.

FORCEPS, PIG.

Superior.....per doz. $4 75
Whisson's Imp..... " 5 25

FORKS.

Barley.
Steel New List.....65&10%
Wood, 4-tines, per doz.....$5 00
Coal, Coke, Cottonseed.....30%
Hay.
2-tine.....60%
3 " .....60&5%
4 " .....60&10%
Digging.....65&5%
Scoop.....30%
Header.
3-tine.....60&5%
4 " .....60&5%
Manure.
4-tine 60%
Ore.....40%
Spading.

FRAMES.

Hack Saw.
Union.....per doz. $5 75
Jenning's adj..... " 7 50
Cast..... " 2 50

FREEZERS, ICE CREAM.

Arctic.
Qts..... 1 2 3 4 6
Each...$1.10 1.30 1.50 1.80 2.20
Qts..... 8 10 12 15
Each.....$2.95 3.80 4.50 5.20
Jack Frost.
Qts..... 2 3 4 6 8 10
Price .$1.00 1.90 2.20 2.80 3.60 4.65

GAUGES.

Butt and Rabbet.
Cream Pail.
Fairmont.....per doz. $3 75
Marking, Mortise, etc.....
.....50&10%
Saw.
Wire.
Disston's.....25%

GIMLETS.

Discount.....35@40%

GLASS, WINDOW.

Single.....90&20%
Double.....90&25%

GLASSES, LEVEL.

GLUE.

Bulk.
B Amber.....per lb. 12 [illegible]
A White..... " 15 [illegible]
H. S. Amber..... " 16½c
Liquid.
Army & Navy.....40%
Le Page's—
List "A".....37½%
List "B".....33⅓%
List "C".....25%

GOODS.

Bright Wire.....90%

GREASE, AXLE.

Wood Boxes.
Diamond.....per gro. $5 50
Frazer's..... 9 50
Hub Lightning..... 5 25
Paragon..... 6 75
Wood Pails.
Frazer's, 15 lb. 80c; 25 lb. $1.30 each.
Hub Lightning, 15 lb. 55c; 25 lb. 70c each.
Tin Cans.
Chamellene Graphite.
1 lb. per gross.....$9 50
3 lb. per gross.....25 00
5 lb. per gross.....37 00

GRIDDLES.

Soapstone.....33⅓%

GRINDSTONES.

Family.
Inches..... 6 8 10
Per doz.....$7.25 9.75 12.00
Loose.
Per ton.....$20 00@$21 00
Mounted.
Ball Bearing..... 1 2 3
Each.....$3.15 3.00 2.85
Common Bearing 1 2 3
Each.....$3.00 2.80 2.65

GUN WADS
(See Ammunition.)

HAFTS, AWL.

Brad.
Common.....per doz. $0 19
Peg.
Common..... " 22
Patent, plain top..... " 47
Patent, leather top... " 52
Sewing.
Common..... " 22
Patent..... " 52

HALTERS.

Jute Rope.....per doz. $1 10
Sisal Rope..... " 1 85
Web..... " 2 00
Leather, rope tie..... " 8 50
Leather, leather tie..... " 11 50

HAMMERS, HANDLED.

Blacksmiths' Hand.
Plumbs.....60&5%
Engineers'.
Plumbs.....60&5%
Farriers'.
Plumbs.....40&10%
Machinists'.
Plumbs.....60&5%
Nail.
Plumbs.....40&7½%
Quaker City.....per doz. $3 50
Cast..... " 1 15
Maydole's.....30&5%
Riveting.
Plumbs.....40&12½%
Shoe.
Cast.....per doz. $0 90
Tack.
All Iron.....per doz. $0 35
Pol'd Iron, Hickory hdl. " 50
Mall. Iron, Inlaid..... " 1 55
Magnetic..... 1 2 3
Per doz.....$0.70 .80 1.00
Magazine.. .....per doz. 4 75

HAMMERS, HEAVY.

Heavy Hammers and Sledges.
Under 5 lbs .....80&5%
5 lbs. and over.....80&10%
Masons'.
Single and Double Face.....80&5%

HANDLES.

Auger.
Common Assorted....per doz. $0 50
Pratt's Adjustable, Nos. 1 & 2, per doz..... 4 50
Ives' Adjustable.....per set, 1 35
Axe.....40%
Chisel.
Hickory, Tanged Firmer, Assorted, 33c; Large, 38c per doz.
Hickory, Socket Firmer, Assorted, 27c; Large, 30c per doz.
Applewood, Tanged, Firmer, Assorted, 29c; Large, 38c per doz.
Applewood, Socket, Firmer, Assorted .....per doz $0 24
Coal Pick.....40%
Drifting Pick.....40%
File, assorted, 13c; Large, 16c per doz.
Hammer.
Adze Eye.....per doz. $0 40
Blacksmiths'..... " 40c@70c
Machinists'..... " 45c@70c
Hatchet..... " 40
Hay and Manure Fork.....30%
Hoe and Rake.....30%
Plain.....per doz. $0 75
Varnished..... " 80
Screw Driver.
Assorted..... " 37
Large..... " 48
Shovel and Spade.....33⅓%

HANGERS.

Barn Door.
U. S. Rolled Bearing.....60&10%
Matchless.....50&10%
Storm King.....60%
World's Best.....50%
Wagner's Adjustable.....70&10%
Warehouse Big Twin.....25%
Conductor P.
Griffin.....70&10%
Iwan's Perfection.....50%
Eave Trough.
Baker's.....per gro. $2 35
Imperial.....20%
Wire.....33⅓%
Parlor Door.
Acme.....per set, $3 75
Ives' Improved..... " 2 00
Lane's Standard..... " 3 50
Lane's New Model.... " 3 10
Le Roy Noiseless..... " 4 00
Richards'.....40-10&5%

HASPS.

Hinge, Wrought.....40%
With Staples—See Staples.

HATCHETS.

Crescent.....50&10%
Cast Claw.....per doz. $1 10@1 35
Cast Shingling.... " 1 25
Germantown.....30%

HAY KNIVES.

See Knives.

HAY RACK BRACKETS.

Wenzleman's No. 1.....per doz. $9 00
Wenzleman's No. 2..... " 9 00

HINGES.

Blind.
Clark's Gravity ... per doz. sets, 95c
Parker's.....65%
Shepherd's Noiseless, for Wood Casing.....per doz $1 05
Gate.
Clark's..... 1 2 3
Hgs & Ltch. . doz. $2.50 3.25 4.25
Hinges only... " 2.00 2.50
Latches only . " .90 .90
Knuckle.....per doz. prs. $6 00
Leed's..... " sets 6 75
Superior..... " prs. 9 50
Spring.
Banner.....50%
Chicago.....25&5%
Columbia Dbl. Acting....40&10&5%
Gem.....25%
Ideal Detachable.....per gro. $11
Matchless.....40%
New Idea.....per gro. $8 00
Oxford.....20%
Wrought Iron
New Lists .....
McKinney
Light Strap Hinges.....60%
Heavy Strap Hinges.....60, 10&10%
Light T Hinges.....55%
Heavy T Hinges.....45%
Extra Heavy T Hinges.....60%
Screw Hook and Strap.
6 to 12 in.....per 100 lbs. $4 50
14 to 20 in..... " " 4 25
22 to 36 in..... " " 4 00
Screw Hook and Eye.
½ in.....per 100 lbs. $6 75
⅝ in..... " " 7 75
¾ in..... " " 9 75

HOES.

Garden .....70&10%
Grub.
Extra.....70%
Hazel.....per doz. $5 00
Ladies' and Boys'.....75%
Mortar.....75&10%
Planter's Eye.....62½%
Weed.....75&15%

HOLLOW WARE—See Ware.

HOOKS.

And Eyes.
Brass.....60%
Iron.....70%
Awning.....per gro. 60&10%
Belt.
Brown's.....70&5%
Jones'.....65&5%
Bench.
See Stops, Bench.

Box.
Inch..... 5 7 10 12
Per doz.....$1.90 2.10 2.25 2.65
Humason & Beckley's..per doz. $2 50
(See Goods, Bright Wire.)
Bush.
Common Axe Handle. per doz. $7 00
Chain.
Inch..... ¼&5/16 ⅜ 7/16 ½
Per 100...$7.60-8.10 9.75 11.50 12.60
Clothes Lines.
Japanned .....per doz 22c@24c
Galvanized..... " 40c
Coat and Hat
Cast Iron .... per gro. 72c@$1 50
Gem Wire.....70%
Conductor.
Malleable.....25%
Wrought.....20%
Corn.
Common, rivetted, painted red.....per doz. $2 25
Little Giant..... " 3 25
Gate.
See Goods, Bright Wire.
Grass.
Common. Nos..... 2 3 1
Per doz.....$1.50 1.60 1.70
German.....per doz. 1 75
Gypsy..... " 2 50
Hammock.
With plate.....per doz. 50
With screw..... " 45
Lambrequin, or Drapery, per gro. .21c
Picture.....50%@50&10%
Potato and Manure.....70&12½%
Screw.
Brass.....80&5%
(See Goods, Bright Wire.)
Seat Spring .....per lb. 5½c

HOOPS, TUB.

Elastic ... per case of 2 doz.... $1 50

HOSE, GARDEN.

	Coupled per ft.
Velvet, 3 ply-¾" guar. press.....	7½c
Eclipse, " " "	8½c
Diamond " " "	10
Jeanette " " "	13
Pennsylv'a " " "	16

COTTON COV. RUBBER HOSE.

High Grade-¾"-guar. press.	400 lbs.	11½
Special " " "	300 "	9½c
Leader " " "	100 "	7½c

HUSKERS.

Boss.
Nos..... B BB E 200
Per doz.....$2.00 2.00 1.75 .80
Nos..... L PP P K
Per gro.....$5.40 6.00 6.00 10.50
Nos..... 2000 3000 O
Per gro.....$3.50 9.00 24.50
Nos..... 60 59 64 68
Per doz.....$2.15 2.15 .85 1.45
Brinkerhoff's.
Per gro.....$14 40

IRON.

See Metals.—First column.

IRONS.

Curling.
C.....per doz. $0 40
B..... " 50
A..... " 58
Princess..... " 70
Thelma..... " 1 25
Pinking..... " 70
Plane.
Wood Bench.....20&5%
Sad.
Charcoal.....per doz.$11 00
Common, polished, per 100 lb. 3 75
No. 70 Asbestos.....$1 20 net
No. 100 " ..... 1 30 net
Common, nickel plated, 5 25
Chinese Polishing.....per doz. 7 40
Laundry, No. 1..... " 5 75
Laundry, No. 2..... " 6 25
Mrs. Pott's
No. 50 J, Enterprise, per set 93
No. 55 J, " " 90
No. 50 T, " " 1 00
No. 55 T, " " 96
Tailors' Sad.....per lb. 5½
Tailors' Geese..... " 5½
Tuyere.
Single Duck Nest.....per doz $5 25
Double Duck Nest .. " 6 25
Sutton.....each.... 2 60

JACKS.

Locomotive.....70%
Wagon.
Miller 50%
Oliver,
Nos..... 0 00
Each.....$0.60 $0.80

Standard.
Nos..... 1 2
Each.....$0.60 1.00
Wilcox.
Nos..... 1 2 3
Each..... $0.85 1.20 2.90

KETTLES.

Brass.....15%
Cauldron.....40&5%
Copper..... per lb., 27c
Maslin.....55%
Sugar.....50%

KNIVES.

Beet Topping.
Clyde, 9-in. Scimiter Blade, doz.$3 85
California..... 3 40
Cooper's Hoop.....15%
Corn.
Clipper.....per doz. $1 75
Disston's..... " 2 75
Earle's..... " 3 00
Woodford..... " 2 25
Drawing.
Standard.....70%
Adjustable.....15%
Barton's Carpenters' 10%
Folding Handle.....25&5%
Hay.
American, Sickle Edge...doz. $10 50
Canton, Sickle Edge..... " 8 25
Heath's..... " 8 00
Iwan's, Sickle Edge..... " 9 50
Iwan's, Impv'd Serrated . " 10 00
Lightn'g, Holt's Genuine. " 6 50
Lightning Pattern..... " 6 00
Wadsworth's Sp'r Poin'.. " 8 50
Hedge.
Challenge.....per doz. $6 00
Disston's..... " 3 75
Mincing.
Common, Single..... " 40
Common, Double..... " 50
Streeter, 4-Blade..... " 1 30
Streeter, 6-Blade..... " 2 00
Putty.
Common.....per doz. $0 60@1 00
Lander'r..... " 1 40@1 75
Scraping.
Beech Handle..... 75@1 00
Lander's..... 5 25@6 00

KNOBS.

Door.
Mineral.....per doz. $0 80
Porcelain..... " 90
Jet..... " 90

LADDERS.

Common Long.
Per ft.....9c@14c
Extension.
Per ft.....14c
Step.
Common, per ft.....7½c
Common, with Shelf, add 10c.
Keystone.....15c
Triumph, per ft.....20c

LANTERNS.

Bull's Eye Police.
3 -in. Flash Light....per doz. $6 00
2½-in. Regular..... " 4 90
3 -in. Regular..... " 5 50
Tubular.
Dietz & Hanes' . . ..net prices.

LEADERS, CATTLE.

Nos..... 1 2 3
Per doz..... $0 55 .70 2.75

LEATHER, LACE.

Cut.....33⅓%
Sides.
Ex. Quality ..... per sq. ft., 27

LEATHERS, PUMP.

Valve and Plunger.....10%

LIFTERS.

Stove Cover.
Coppered.....per gro. 1 75@3 65
Ideal..... " 5 50
Alaska, Coppered " 4 00
Alaska, Nickeled. " 5 00
Transom.
Payson's.....80%

LINES.

Chalk.
Twisted in 20-ft. hanks.
Nos.... 4 6 7 8 9
Gross...$1.50 2 00 2 25 2 50 3 00
Twisted in 50-ft. balls.
Nos..... 1 2 3 4
Per doz.....25c 30c 35c 41c
Braided in 20-ft. hanks.
Nos..... 0 1 2 3
Per doz.....22c 25c 31c 35c
Mansons', in 100-ft. hanks...doz. 80c
Clothes.
60-ft. Jute.....per doz. $0 95
72-ft. Jute..... " 1 15
60-ft. Sisal..... " 1 40
72-ft. Sisal..... " 2 15
50-ft. Cotton..... " 1 15
50-ft. Braided Cotton. " 25

LINING, STOVE.

In Bricks .....per crate, 42c

MACHINES.

Boring.	Without Augers	With Augers
Angular.....per doz.	3 00	4 40
Upright..... "	2 00	4 00
Leather Riveting.		
Chicago, Pomeroy....per doz.		$9 00
Excelsior..... "		2 00
Handy..... "		2 00
Little Giant..... "		3 00
Pony, Pomeroy..... "		7 20
Washing.		
Winner.....per doz.		54 00
Keystone..... "		54 00
U. S. Steel..... "		60 00
Advance, f.o.b.Chicago "		24 50

MAIL BOXES.

See Boxes.

MALLETS.

Carpenters'.
Fibre Head, Small....per doz. $5 00
" " Medium. " 5 75
" " Large... " 7 00
Round Hickory..... " 2 25
" Lignumvitæ... " 4 00
Square Hickory..... " 2 25
" Lignumvitæ... " 4 50
Tinners'.
Applewood..... " 1 70
Hickory..... " 1.00@1 50
Hickory Sheet Iron... " 1 50

MATS.

Door
National Rigid.....50, 10&5%
Acme Steel Flexible.....33⅓%
Stove.
No. 2.....per gro. $3 25
No. 1..... " 3 50
No. 1 Asbestos Toasters, or wire-covered Stove Mats, with handle.....per doz. 1 10
No. 2 Asbestos Toasters, with ring.....per doz. 60

MATTOCKS.

Plumbs.....65&10%
Extra.....60%

MAULS.

Iron, lbs.....	10	13	16	18
Per doz....	$4.00	4.50	5.25	5.60
Wood face, lbs.....	10	12	14	
Per doz.....	$5.00	5.50	6.00	

Wood Choppers'.
Lake Super'r & Oregon Pat. 75&10%

MEASURES.

	½ pk.	1 pk.	bu.
Galvanized, per doz.	$2.25	3.00	3.85
Japanned.. "	1.75	2.45	3.15

MICA.

First Quality.....40&5%
Second Quality.....50&5%

MILLS, COFFEE.

Enterprise.....25%
Parker.....50&5%
Arcade.....40-12½&2½%

MITRE BOXES.

See Boxes.

MOPS.

Erie.....per doz. $3 15
Handled Cotton.

Pounds.....	¾	1	1¼	2
Per dozen....	$2.00	2.35	2.65	3.25

MOWERS, LAWN.

Gladiator—B. B.			
Inches.....	16	18	20
Each.....	6.50	7.25	8.00
King Universal—B. B.			
Each.....	5.25	5.75	6.00
Inches.....	14	16	18
Big Giant.....	3.50	3.90	4.25
Little Giant	2.50	2.65	2.75

NAILS.

Cut Steel .....rates, $2 50
Cut Iron..... 2 60
Wire.
Small Lots..... $2 28
Carload Lots..... 2 18
Cement Coated..... 2 30
Horse Shoe.
Ausable.....55&5%
Capewell.....15%
Perfect.....55&5%
Putnam.....20&5%
Star.....35&5%
Clover Leaf ..... per lb., net, 10½c
Picture.
Brass Heads.....25%
Brads.....85%
Furniture.....15%

NAIL PULLERS.

See Pullers.

NAIL SETS.

See Sets.

NETTING, POULTRY.

Galvanized beforeweaving .80,10&2½%
Galvanized after weaving.....80&7½%
Cut Pieces.....65&5%

NIPPERS.

End Cutting.
Stubb's Pattern. Inches 5½ 6
Per dozen..... $4.00 4.25
End and Diagonal Cutting.
Swedish Side.....75%
Utica Drop Forge & Tool Co....60%
Hoof.
Heller's.....40&10%
V. & B.....55&5%

NOZZLES.

Hose.
Genuine Gem.....per doz. $3 90
Magic..... " 3 60
Mystic..... " 3 00

NUTS, HOT PRESSED.

Square Blank.

In	¼	5/16	⅜	7/16	½	⅝	¾
lb	9½c	8c	6½c	5½c	5½c	5c	4½c

Square Tapped.

In.	¼	5/16	⅜	7/16	½	⅝	¾
lb:	12½c	10½c	8c	7½c	6½c	6½c	6c

For 5-lb. boxes add ½c per lb. to above prices.

OILERS.

Chase Pattern.
Brass and Copper.....60%
Zinc.....60%
Engineers'.
Cannon.....55%
Tin .....per doz. $2 00@2 25
Machine.
Common.....per doz. $0 58
Copper Plated Steel... " 1 00
Malleable Iron.....60, 10&5%
Japanned.....65@75c

OPENERS.

Box.

Inches.....	10	12	14
Flat.....per doz.	$2.85	3.60	4.15
Round.... "	2.10	2.25	2.75

Can.
Delmonico .....per doz $1 30
Never Slip..... " 65
Crate.
V. & B..... " 5 75

OUTFITS, COBBLING.

Combination.....per doz. 11 00
Economy..... " 4 65
Family..... " 9 75

PADLOCKS.

Standard Wrought.....75&5%
Champion.....50%
Eureka.....40, 10&5%
Yale.....60&5%

PAILS.

Cream.
14-qt , without gauge, per doz. $2 50
20-qt., " " " 3 00
20-qt., with gauge.... " 3 50
Sap.
10-qt., Galvanized, per 100....$13 00
12-qt., " " 14 50
14-qt., " " 16 25
16-qt., " " 17 75
10-qt.,IC Tin..... " 10 25
12-qt., " .... " 11 75
14-qt., " .... " 13 00
10-qt.,IX Tin.... " 12 75
12-qt., " .... " 16 00
14-qt., " .... " 17 00
Stock.

Galv'd, qts.	14	16	18	20
Per doz.....	$3.75	4.00	4.75	5.25

Water.

Galvanized... qts.	10	12	14
Per doz.....	$1.95	2.20	2.45

Wood.
Cable, 2-Hoop.....per doz. $1 70
Cable, 3-Hoop..... " 1 90
Cedar, 3-Hoop..... " 2 85
Standard, 2-Hoop.... " 1 60
Standard, 3-Hoop.... " 1 80

PANS

Dripping.....60&5%
Fry
Common .....75&10%
Acme 70%
Roasting.
Paxton,

Nos.....	1	2	3	4
Per doz....	$4.75	5.75	6.50	7.50
Neverburn ..	4.00	4.50	5.50	6.00

Savory, No. 200.....per doz. $8.00

PAPER.

Building.
Plain.....per 100 lbs. $1 25
Tarred..... " 1 35
Tarred Felt..... " 1 65
No. 20, Red Rosin....per roll, 40
No. 30, Red Rosin.... " 55
Sand and Emery.
Star ..... low list, 50%
B. & A.....50%
Wrapping.
Drab Fiber.....per lb. $0 00
Rag..... " 0 00

PARERS.

Apple.
Bay State.....per doz. $13 00
Turntable..... " 0 00
White Mountain..... " 5 00
Reading..... " 7 00
Potato.
Goodsell's Saratoga, 10½ in., doz. 6 50
Goodsell's Saratoga, 5 in., doz. 5 50

PICKS.

Adze Eye Ore.....70%
Drifting and Poll Picks.....70%
Plumbs, Railroad.....70%
Surface.....70%

PINCERS.

Carpenters', cast steel.

Inches.....	6	8	10	12
Per doz.....	$2.00	2.60	2.95	3.75

Blacksmiths'.....45%
Heller's.....40%

PINS.

Clothes.
Common.....per box of 5 gro $0 52
Hoyt's..... " " 31
U. S..... " " 70
Picket.
Fluted, 15-in.....per doz. $0 70
Fluted, 21-in..... " 1 60
Spiral..... " 1 90

PIPE.

Conductor.

	Gal. Steel	Charcoal
L. C. L. to Dealers:—		
Eastern	70&10%	50&10&2½%
Pittsburgh	75&10&5%	60%
Central	75&10%	60%
Northwestern	75&7½%	60%
Western	70&12½%	50&12½%
Tennessee	70&10%	50&12½%
Southern	70%	50&12½%
Southwestern	70%	50&5%

Terms 60 days; 2% Cash 10 days.
Factory shipments generally delivered.

Lead.
Full coils .....per lb. 7½c
Cut coils..... " 7½c
Stove

Acme—Inches....	5	6	7
Smooth, per jt...	8½c	9½c	10½c
Planished, "	22 c	33 c	43 c
Peerless—Smooth,	7½c	8 c	9½c
Polished	14½c	15½c	18 c
Planished	28 c	31 c	35½c
Made-up—Inches..	5	6	7
Smooth	7½c	8 c	9½c

7 to 6 in. Smooth Tapers, pr jt...13c
6 in. Smooth T's..... " 27c
7 to 6 in. Planished Tapers.....45c

Yale Patent Lock Pipe—Stove.

	5"	6"	7"	7" to 6"
	—Cents—			
Battle Axe Blue...	7	7½	9½	10½
Can't Slip " ..	7½	8½	10	11
Peerless " ..	7½	8½	10	11
Duplex " ..	10	11	13	14
Yale, Rus. Fin....	15	16	17	18
Duplex Planished.	29	31	37	38
Galvano, Gal.....	15	16	17	18

If wanted made up, add per joint or grooved, 1c; riveted, 1½c. Grating made-up pipe extra.

Wrought Iron Gas Pipe.
⅛@½-in., black.....discount, 60%
⅝@½-in., black..... " 60,10&5%
¾-in. to 6-in, black... " 70%
7-in. to 12-in., black... " 62½%
⅛@½-in., galvanized.... " 42%
⅝@½-in., galvanized.... " 50%
¾-in. to 6-in., galvan'd " 57½%
7-in. to 12-in., galvan'd " 45%

PLANES.

Sargent Iron Bench.....60%
Stanley Iron Bench .....25&5%

PLATES, TIN.

See Metals in Column 1.

PLIERS.

Giant, Button's—80% off list.
Cutting
Bernard's.....30%
Lodi.....50%
Upper End and Diagonal Cutting
Swedish Side.....70%
Utica Drop Forge & Tool Co....60%
Fencing.
Black Bull.....per doz. $8 25
Farmers' Choice.....per doz. $8 00
Russell's..... " 8 25
Flat and Round Nose.
Bernard's.....30%
German.....65%
Lodi.....50%
Paragon.....50%

Gas—Inches..	7	8	10	12
Per doz.....	$3.00	3.50	4.50	5.50

Tinners'.
Hollow.....40%
Solid.....each, 5½c

PLUMBS AND LEVELS.

Common .....60&10&10%
Cook's.....40%
Davis' Iron.....25%
Davis' Inclinometer.....15%

POINTS

Drive Well Points.....75&5%

POKERS, STOVE.

Wr't Steel, str't or bent, per doz. $0 55
Wr't Steel, wood hand'ls " 80
Nickel Plated, coil hand'ls " 65

POKES, ANIMAL.

Cracker Jack, wr't steel, per doz. $4 50

POLISH.

Metal.
White Silk, half pints, per doz, $2 00
White Silk, 6-oz. cans, per doz. 1 00
Shoe.
M. C. D.....per doz.....36c@50c
F. C. O..... " 40c
T M..... " .55c@$1 75
Imperial.....per gro 5 00
Stove.
Black Eagle, 1-lb. cans, pr. gr. $15 00
Black Silk—
5-lb. pail..... $0 70
Paste, 5-oz. cans....per doz. 75
Paste, ½-lb. cans.... " 1 05
Liquid, ½-pt. cans... " 1 05
Liquid, 6-oz. cans... " 75
Black Jack, ½-lb. cans. " 9 25
Dixon's Carb. of Iron. " 5 75
Nickel Plate..... " 4 50

POPPERS, CORN.

Round or Square, 1-qt. per doz. $1 05
Square, 1½-qt..... " 1 15
Square, 2-qt..... " 1 35
4-qt..... " 3 75

POTS, FIRE.

Clayton & Lambert's, each, $4 75@6 25
Gate City.....each, 6 25
Gem.....each, $6 75@8 50

POWDER.

See Ammunition.

PRESSES, FRUIT AND JELLY.

Enterprise Manufacturing Co.....25%

PRIMERS

See Ammunition.

PRUNERS.

Disston's Pole.....per doz. $6 50
Henry's Improved..... " 75&10%
Water's Improved..... " 80%

PULLERS.

Cork.
Daisy..... each, $3 10
Phœnix..... " 1 40
Quick and Easy..... " 2 70
Nail.
Giant.....per doz. 10 50
Giant Pattern..... " 6 00
Jumbo..... " 9 00
Tack—Giant ..... " 40

PULLEYS.

Awning—Jap'd.....60%
Clothes Line.....50&10%
Hay Fork.
Iron Wheel, 5-in.....per doz. $1 75
Wood Wheel, 6-in.... " 1 75
Wood Wheel, 6-in., pass knot, ...per doz. 2 15
Hot House—Jap'd.....50&10%
Screw—Jap'd.....60%
Side—Jap'd.....50&10%
Sash.
Common.....per doz. $0 16
Common-Sense, 2-in.. " 20
Empire Pattern, 2-in.. " 20
Ideal..... " 20
Steel..... " 25

PUMPS.

Pitcher Spout.

Nos.....	1	2	3	4
Each.....	$1.00	1.15	1.30	1.70

Spray.
Blizzard.....per doz. $14 50
Cyclone, tin..... " 3 40
Cyclone, copper..... " 6 75
Daisy..... " 9 00
Little Giant.....each, 2 25

PUNCHES.

Conductors'.
No 22.....per doz $2 2
Machine.....per lb 19
Saddlers'.
Common .....per doz 60c@70c
Good..... " 72c@84c

PUTTY.

In Bladders.
Strictly pure.....per 100 lbs. 2 25

RAIL.

Barn Door.
Matchless, 1-in..... 3 c
Matchless, 1½-in..... 3½c
Storm King..... 4 c
Sliding Door.
Painted steel.....per ft. 4½c
Bronzed wrought iron...per ft. 8½c

RAKES.

Coal or Wood.....per doz. $5 20
Garden.
Steel.....70%
Steel, bow.....70%
Malleable iron, heavy.....60&10%
Hay.
Wood.....$1 50@$2 00
Lawn—Wood.
XXX.....per doz. $3 00
Automatic..... " 5 25
Lawn Queen..... " 2 75
Jumbo, 36 teeth..... " 5 25

RASPS—See Files.

RAZORS.

Bo-ras-ic.....50%
Red Devil.....50%
Tree Brand.....50%

REGISTERS.

(All Sizes)

Japanned, Bronzed and Plated...70%
White Porcelain Enameled...50&10%
Solid Brass and Bronze Metal....40%
Single Valve (Baseboard and Sidewall).....70&10%

REGISTER FACES

Japanned, Bronzed and Plated
4x6 to 14x14.....70%
14x14 to 38x42.....75&10%
Heavy Round Gratings.....75&10%
White Porcelain Enameled...50&10%
Solid Brass or Bronze Metal.....40%

RINGS.

Bull.

	2½ in.	3in.
Copper		
Per doz	$1 10	$1 40
Rea's Improved Self-Piercing copper, pr doz	2 00	....
Steel, per doz	85	95
Nickel plated	1 35	....

and Ringers—Hog.
Blair's Rings.....per doz. $0 58
Blair's Ringers..... " 75
Brown's Rings..... 50
Brown's Ringers..... " 80
Champion Ringers.... " 60
Hill's Ringers..... " 70
Hill's Ring, boxes.... " 47
Major Rings..... " 60
Perfect Ringers..... " 95
Wolverine Rings..... " 1 40
Wolverine Ringers.... " 80
Fruit Jar.
White.....per lb.....30c
Key.
Split, round.....per doz. $0 17
Split, square..... " 32
Ball, round..... " 32

RIVETS.

and Burrs.
Copper Belt.....40%
Coppered Iron.....60&10&5%
Tinners'.....60&10%
Hame.....per lb. $0 10
Slotted Clinch per doz 40c@45c
Tubular
Nos 1 and 2 assorted sizes, doz, 45c

RIVET SETS

See Sets.

ROPE.

Cotton.
¼, 5-16 in. Com on reels. .per lb. 11½c
¼, 5-16 in Com. in coils. . " 12 c
¼, 5-16 Imperial in coils.. " 21 c
Sisal.
1st Quality .....12 c
Hardware Grade, rates, per lb...10 c
Pure Manila.
1st quality.....per lb. 15½c
Hardware Grade, rates... " 14½c

RULES.

Boxwood.....50&10%
Ivory.....

SASH WEIGHTS.

See Weights.

SAWS.

Back.
Disston's.....25%
Jackson's.....25%
Butchers'.
Disston's.....30%
Circular.
Disston's.....50%
Hiles'.....50&10%
Compass.
Common.....per doz $1 35@1 60
Disston's .....%25
Cross-Cut
Disston's.....45%
Dehorning.
Disston's.....per doz. $5 75
Hack.
Disston's.....25%
Keystone.....30%
Hand and Rip.
Brown's.....30%
Disston's No. 7.....30%
Disston's Nos. 8, D8, 12, 76, 112, D100, and 120 (new list).....25%
Keystone.....30%
Enterprize, hand.....per doz. $5 00
Our Saw, hand..... " 4 00
Our Saw, rip..... " 4 50
Keyhole—Disston's.....25%
Kitchen.
Sterling 25%
One Man.....50%
Panel
Brown's 30%
Disston's No. 7.....30%
Disston's No. D100.....25%
Pruning.
Brown's 25%
Disston's 25%
Wood
Common.....per doz. $4 50
Clover Leaf..... " 6 00

SAW BUCKS—See Bucks.

SAW SETS—See Sets.

SAW TOOLS—See Tools.

SAW FRAMES.

Common, plain.....per doz. $1 25
Common, painted..... " 1 70

SCALES.

Counter.
Pelouze.....40&10%
Platform.
Osgood.....50%

SCOOPS.

Grain.
½-bu. "Hercules".....per doz. 13 70
1-bu. "Hercules"..... " 15 00

SCRAPERS.

Box.
Triangular.....per doz. $4 00
Cabinet.
Cast Steel . . . . per doz , 60c@75c
Road.

Cubic ft.	7	5	3
Without run's, ea.	$4.00	3.75	3.50
With runners, ea..	4.25	4.00	3.75

SCREWS.

Bench.

Iron, in.....	1	1½	1½
	$3.50	4.00	4.75

Wood, white maple...per doz. $3 50
Hand—Wood.....10%
Hand Rail.....80&10%
Jack.....70&10&5%
Lag or Coach—all sizes, gimlet pointed.....75&5%
Saw—Centennial.

Nos ..	1	2	3	4	5	6
Per doz.	18c	20c	26c	30c	23c	25c

Wood.
F. H. Bright.....87½&5%
R H Blued.....85%
F. H. Jap'd.....82½%
F. H. Brass.....85%
R. H. Brass.....80%
R. H. Nickel Plated.....75-10%

SCYTHES.

Be Ve Be, grass.....per doz. $8 00
Clipper, grass..... " 8 25
Clover Leaf Dutchman. " 7 50
Honest Dutchman..... " 7.50
Be Ve Be..... " 7 50

SHAVING SETS.

Smith & Hemenway.....60%

SETS.

Nail.
Round, common.....per 3oz. $0 32
Square, common..... " 42
Octagon, common..... " 33
No. 5, square..... " 75
Cup point, knurled... " 75
Rivet.
Farmers'.....per doz. $1 20
Tinners'.....50&10%
Saw.
Aiken's Pattern.....per doz $3 50
Common Lever..... " 1 20
Disston's Monarch.... " 6 50
Disston's X Cut ..... " 12 00
German..... " 1 05
Leach's..... " 80
Nash's Hand..... " 3 15
Nash's X Cut..... " 4 20
Stillman's Lever..... " 1 30
Stillman's X Cut..... " 2 50

SHARPENERS, SKATE.

Diamond.....per doz $1 60
Smith & Hemenway 20%

SHAVES, SPOKE

Iron.....per doz $1 10@1 85
Wood ..... " 2 75@4 75
Bailey's .....50&5%
Goodell's 15%

SHEARS

Pruning
Buckeye, No. 1.....per doz $5 75
Buckeye, No. 2..... " 7 40
California Pat., 9-in.. " 3 20
Cailfornia Pat., 10-in.. " 4 00
Draw Cut, No. 3..... " 13 75
Draw Cut, No. 4..... " 16 50
Henry's Pat. 0 01 14 012
Per doz.....$1.40 2.10 2.90 2.80
Star.....per doz $4 00
Sheep—No BBA.
Inches..... 6 6½ 7
Reg. Grip.....$11.25 11.50 12.00
Nar. Grip, doz.... 11.00 11.25 12.25
Tinners'—See Snips.

SHEAVES, SLIDING DOOR.

Common.
Inches..... 3 4 5
Per set..... $0.34 .42 .70
Hatfield's.
Per set..... $0.75 1.00 1.60

SHELLS—See Ammunition.

SHELLERS, CORN.

Union.....per doz. $6 75

SHIELDS.

Expansion Bolt Shields.....50&10%

SHOES.

Conductor.....60&10%

SHOT—See Ammunition.

SHOVELS AND SPADES

Coal.
No 2 Woodford.....per doz. $5 50
No. 182..... " 6 00
Ames' new list .....Discount, 12½%
Per doz.
Neverbreak, hollow bck, blk. $15 75
National.... " " " 14 75
Buckeye.... " " " 10 00
Mohawk.... " " " 9 00
Drain.
Iwan's Perfection.....50%
Railroad, etc.
Black Diamond.....per doz. $1 50
Crescent..... " 5 75
Keystone..... " 8 75
Star..... " 4 75
Vaterland..... " 9 50
Hollow Back..... " 4 75
Ames, new list.....Discount, 12½%
Snow.
Per doz.....$1.65@$0.00
Alaska Steel.
D Handle.....per dos. $3 50
Long Handle..... " 3 00

SINKS.

Cast Iron.
Painted.....50&10%
Enameled, White.....50&10%
Wrought Steel.
Painted, new list.....40-10&5%

SLEDGES—See Hammers.

SNAPS, HARNESS.

Champion.....33⅓%
German Pattern.....30&5%
Judd's Pattern.....50%

SNATHS.

Double Ring, Bush.....per doz. $6 00
Patent Loop, Bush..... " 5 75
Patent Loop, Grass..... " 5 50

SNIPS, TINNERS'.

Clover Leaf.....40&10%
National.....40&10%

SOLDER—See Metals.

SPRINGS, DOOR.

Perfect.
Nos..... 1 2 3 4
Per doz.....30c 35c 40c 54c
Reliance.
Per doz ... light, $1.25; heavy, $2 50
Star.
Per doz .... light, 90c; heavy, $1 35
Torrey's.....per doz. $1 35
Warner's No..... 11 13
Per doz..... 75c $1 35

SQUARES.

Steel and Iron.....70&10%
(Add for bluing, $2.50 per doz., net.)
Mitre.
Try.
Try and Bevel.
Try and Miter.
Fox's.....per doz. $5 75
Winterbottom's.....70%

SQUEEZERS, LEMON.

Common Wood.....per doz. $0 70
Porcelain Lined, Wood.. " 1 25
Boss, malleable iron.... " 1 20
Iron Frame, porc'n bowl " 1 90
Iron Frame, glass bowl . " 2 35
Little Giant, tin'd iron . " 4 00
Drum, japanned..... " 3 60
Drum, nickel plated ... " 4 50

STAPLES

Blind.
Barbed.....per lb ...9½@9¾c
Butter Tub..... " .....8 @8½c
Fence—less than carload.
Polished.....per 100 lbs. $2 30
Galvanized..... " 2 60
Netting.
Galvanized.....per 100 lbs. 4 00
Wrought.
Wrought Staples, Hasps and Staples, Hasps, Hooks and Staples, and Hooks and Staples.....80-10&10%
Extra heavy.....75&10%

STEELYARD.

Discount 25%.

STONES.

Axe.
Hindostan.....per lb 5½@7 c
More Grit..... " 9½c
Washita ..... " 17 c
Emery.....60%@60&5%
Oil—Mounted.
Arkansas Hard.....per doz.$23 00
Arkansas Soft..... " 15 50
Hindostan .....per lb 6½@6¾
Oil—Unmounted.
Arkansas Hard.....per lb $2 05
Arkansas Soft ..... " 1 10
Lily White..... " 45
Queer Creek..... " 15
Ouachita..... " 38
Washita..... " 26
Sythe.
Black Diamond.....per gro. $8 00
Crescent..... " 4 25
Gem Corundum..... " 7 50
Green Mountain..... " 4 50
La Moille .... " 7 00
Quinnebog..... " 5 00
Red End ..... " 3 75

STOPS, BENCH.

Hotchkiss'.....per dos. $3 50
Stearns'..... " 4 75

STOPPERS, FLUE.

Common.....per dos. $0 40
Crown..... " 45
Gem, flat, painted..... " 85
Gem, cor'd, decorated... " 70
Kirch's..... " 90
Perfect..... " 70@85
Skinner's Common Sense " 80

STOVE PIPE—See Pipe.

STOVE BOARDS—See Boards

STOVE POLISH—See Polish.

STRAPS.

Scoop.....per doz prs., $1 85
Skate..... " " 60@70c

STRETCHERS.

Carpet.
Bullard's.....per doz. $3 90
Excelsior..... " 5 25
Malleable Iron..... " 70
Perfection..... " 6 30
King..... " 4 50
Wire.
N. S. Elwood's.....per doz. $6 00
O. S. Elwood's..... " 6 00
Little Giant..... " 5 75
Safety..... " 10 00
Star Lever..... " 6 25
Canton Tackle Block. " 9 50
Warner's ..... " 6 25

SWIVELS.

Malleable Iron.....per lb. $0 70
Wrought Steel.....per gro. 4 50

TACKS.

American Cut.....90&15%
American Wire.....85&20%
Gill Posters Cut.....90&20%
Glued Carpet.....90&10%
Tinned Carpet.....90&10%
Clamp.....90&10%
Upholsters' Cut.....90&20%
Upholsters' Wire.....90&10%
Double Pointed.....90%
Copper.....per lb. 32c
Canvas Nails.....75&5%
Clout Nails.....75&10%
Hungarian Nails.....80%

TAPES, MEASURING.

Asses' Skin.....40&10%
Bend Leather.....20%
Patent Leather.....20%
Lufkin's Steel.....25%
Lufkin's Metallic.....30%

TEE BEVELS—See Bevels.

THERMOMETERS.

Tin Case.....per doz. 80c@$1 25
Wood Back..... " $2.00@12 00
Glass..... " 12 00

TIES.

Bale.
Single Loop.....80&5%
All other kinds.....70%
Cow—See "Chains."

TOOLS, SAW.

Disston's Universal.....40%
Miniature.
Smith & Hemenway.....25%

TRAPS.

Fly.
Ballon.....per doz. $1 25
Harper's..... " 1 35
Game.
Newhouse.....40&10%
New Victor.....70&10%
Mole.
Reddick's.....per doz. $6 00
Mouse and Rat.
Wood Choker ..per doz. holes $0 12
Tin Choker .... " " 75
Delusion.....per doz. 1 15
Marty Rat..... " 6 25
Marty Rat Imitation. " 3 50
Marty Mouse..... " 3 00
Marty Mouse Imitation " 2 00
Hold-em, wire rat.... " 3 75

TROWELS.

Brick.
Clover Leaf.....30%
Brade's.....15&5%
Disston's.....30%
Rose's.....20%
Plasterers'.
Clover Leaf.....40%
Disston's.....25%
W. & McP.....25%

TRUCKS.

Bag.....each, $2 75
Handy..... " 1 85
Warehouse.....50&10%
No..... 1 2 3
Half Ironed..... $3.00 3.85 5.50
Full Ironed..... 3.45 4.50 6.45

TUBS, WASH

Standard, Wood. Ex.
Nos..... 3 2 1 large
Per doz.....$5.00 6.00 7.00 9.50
Dowell.
Per doz..... 5.35 6.35 7.00 9.50
Cedar.
Per doz..... 6.10 7.10 7.90 10.80
Indurated.
Per doz..... 8.55 9.45 10.80 13.50
Galvanized.
No..... 1 2 3
Per doz.....$6.00 6.75 7.75

TWINE.

Per lb.
3-ply Cotton Wrapping 25c
4 " " " 25c
" " Extra Wrapping..... 27c
4 " " " Hvy. Wrapping 25c
4 " " Wrapping on tubes.... 27c
3 " " " " cones.... 25c
4 " " " " " 25c
India Hemp, ½-lb. balls 19c
" " ¼-lb. " 18c
" " ¼-lb. " .....doz. 75c
2-ply Jute, ½-lb. " 14c
3-ply Jute, ½-lb. " 13c
Jute Wrapping, ½-lb. balls..... 14c
Jute Wool, 1-lb. balls..... 9½c
Seins.
Nos..... 9 12 15
Soft.....per lb 26½ 26 25
Med..... " 26½ 26 25
Hard..... " 27 26½ 26
Staging, ½-lb. ball, size 21..... 26½c
" " " " 24..... 26c
" " " " 27..... 26c
Bagging " " 23c
3-ply "B" in hanks 18c
4- " "B" " 18c
3 " "A" " 27c
3 " Silver Finish, in hanks... 37c
Fodder or Lath.
130 strand..... 6½c
200 strand.....—c

VISES.

Phœnix..... .....30%
Phœnix Oval Slide.
Inches..... 2½ 3 3½ 4½
Each..... $1.25 1.50 1.85 2.75
Parker's Parallel..... 20%
Parker's Victor..... 20%
Parker's Swivel Base..... 20%
Parker's Re-inforced 20%
Parker's X Series..... 20%
Parker's Combination 20%
No. 110, Bicycle..... " 31 50
No. 500, Royal..... " 32 50
No. 350, Universal..... " 28 00
No. 300, Novelty..... " 28 00
No. 310, Keystone..... " 28 00
No. 100, Rival..... " 28 50
Solid Box.....40&5%
Adams' Mechanics'.....each 2 50
Williamson's Universal.....60%

WARE.

Stove Hollow Ware.
Plain or Unground.....50%
Ground Ware.....45%
Enameled Ware.....33⅓%
Country Hollow Ware, per 100 lbs. $3 00
White Enameled Ware.
Maslin Kettles.....60&10%
Covered Ware.
Tin'd and Turn'd.....35&10%
Enameled.....45&10%
Glue Pots.
Tinned..... .....25%
Enameled.....30%
Enameled.
Cherry Blossom and Chrysolite..50%

WASH BOARDS—See Boards.

WASHERS.

Standard O G. cast iron . . .per lb. 2½c
Wrought iron in bulk, per lb.:
In. ½ ⅝ ¾ ⅞ 1
9c 6½c 5c 4½c 4½c 4½c 3½c
Wrought steel in 5-lb. boxes, per lb.:
In. ½ ⅝ ¾ ⅞ 1
10 7c 6c 5½c 5c 5c 4½c

WASHING MACHINES—

See Machines.

WEDGES.

Ax.....per doz. $0 30
Galling.....per lb. 10¾
Saw..... " 8½

WEANERS.

Calf.
Fuller's, per doz.....$2 00 to $2 50
Tyler's Safety, per doz 1 85 to 2 40
Carroll's, per doz..... 3 00 to 3 75
Standard, per doz..... 3 00
Hoosier, per doz..... 3 50 to 4 60

WEIGHTS.

Hitching.....per lb. 2½c
Sash—f.o.b Chicago....pr ton, 26 50

WHEEL BARROWS.

Common Railroad.....per doz. $17 00
Heavy Railroad..... " 24 00
Panama Steel Tray.... " 39 00
Klondike Steel Tray.. " 28 00

WHEELS.

Corundum.....70&10&5%
Emery.....75&5%
Well. Inches.. 8 10 12 14
Per doz..... $2.40 3.25 4.00 6.00

WIRE.

Barbed. Painted. Galv'd
Carloads .. per 100 lbs. $2.33 $2.63
Less than car " 2.43 2.73
Brass.
In coils.....20%
In 1-lb. spools, new list.....50%
Broom—Tinned . . . 60&10&10&10%
Cable—Same price as Barbed Wire.
Copper.
In coils.....20&10%33⅓%
1-lb. spools, new list.....50&10%
Fence—Smooth.
Nos. 6 to 9, An'eal'd, pr 100 lbs. $2 30
Nos. 6 to 9, Galv'd.. " 2 60
Hair—New List.....50%
Market.
Bright, full bdles.....70&5%
Bright, broken bdles.....70%
Coppered, full bdles.....70%
Coppered, broken bdles.....65&10%
Tinned, full bdles.....75&5%
Tinned, broken bdles.....65&10%
Picture—In coils .... 80%@80&10%
In 5-lb. spools.....per lb.....26c
Plain—Small lots..... $2 10
Car lots..... 2 05
Small spools 5c per 100 higher.

WRENCHES.

Acme Standard.....60%
Alligator No. 1 .....85cnet
Always Ready.....50%
Agricultural.....75&5%
Ellis Adjustable.....25%
Malleable "S".....per lb. 08c
Malleable..... " 08c
Stillson Pipe.....70%
Bemis & Call's:
Adjustable S, 40&5%; Adjustable S Pipe, 40&5%; Briggs Pattern, 40%; Combination Bright, 50%
Steel Handle Nut.....50&5%
Combination Black.....50&5%
Merrick Pattern.....50&5%
Double End Adj. S.....40&5%

WRINGERS.

No. 22, Guarantee....per dos, $32 50
No. 110, Guarantee..... " 32 50
No. 110, Brighton..... " 25 50

ADVERTISERS' INDEX.

ALPHABETICAL LIST.

Albany Foundry Co. 4
American Sheet & Tin Plate Co. 48
American Steel & Wire Co. 63
Armstrong-Blum Mfg. Co. 52
Auld & Conger Co. 54
Avery Stamping Co. 1
Barnett & Co., Jos. 55
Bassett & Presley Co. 49
Berger Bros. Co. 53
Bertsch & Co. 53
Bishop Hardware Co. 55
Black Silk Stove Polish Works 45
Boynton Furnace Co. 9
Brammer Mfg. Co., H. F. 50
Brauer, A. G., Supply Co. 46
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Clayton & Lambert Mfg. Co. 52
Cleveland Castings Pattern Co. 46
Clipper Lawn Mower Co. 57
Columbus Bolt Works 1
Conners, Wm., Paint Mfg. Co. 1
Co-operative Foundry Co. 10
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Denning Wire & Fence Co. 1
Detroit Heating & Lighting Co. 5
Detroit Vapor Stove Co 5
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Diener Mfg. Co., Geo. W. 53
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Dixon, Jos., Crucible Co. 45
Eclipse Wire Fence Co. 55
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Haynes-Langenberg Mfg. Co. 9
Heller, W. B. 58
Hemp & Co. 64
Henry & Scheible Co. 14
Hessler Co., H. E. 55
Hooper, C. N. 45
Howes Co., S. M. 58
Hussey & Co. 48
Inland Steel Co. 48
Iwan Bros. 1
Kellogg-Mackay Co. 14
Keystone Nail Co. 54
Kimball Bros. Co. 46
La Crosse Steel Roofing Co. 48
Lawson Mfg. Co. 1
Lenox Hotel 60
Lufkin Rule Co. 57
Magee Furnace Co. 8
Maher & Son Lightning Rod Co. 55
Majestic Furnace & Foundry Co. 9
Marsh, J. 45
Merchant & Evans Co. 51
Meyer Fdy. & Mfg. Co. 52
Michigan Safety Furnace Pipe Co. 11
Milwaukee Corrugating Co. 48
Monitor Stove & Range Co. 3
Monroe Foundry & Furnace Co. 12
Mt Penn Stove Works 13
Mueller, L. J. Furnace Co. 13
Mullins Co., W. H. 50
Munsell & Co., Eugene 5
Napanee Iron Works 53
National Sheet Metal Roofing Co. 54
National Wire Cloth Co. 54
New England Enameling Co. 59
Niagara Machine & Tool Works 52
Nickel Plate Stove Polish Co. 46
North Bros. Mfg. Co. 57
Obermayer, S. Co. 46
Odin Stove Mfg. Co. 5
Parker Co., Chas. 56
Peck, H. E. 44
Pittsburgh Steel Co. 54
Quality Stove & Range Co. 4
Quincy Pattern Co. 46
Ralt & Co., Walter S. 7
Richardson & Boynton Co. 11
Robinson Mfg. Co., J. M. 62
Rock Island Tool Co. 57
Ruby Chemical Co. 53
Schoedinger, F. O. 50
Schwab, R. J. & Sons Co. 12
Sill Stove Works 10
Smith & Hemenway Co. 5
Sperry, D. R. Co. 46
Standard Arms Co. 63
Standard Horse Nail Co. 55
Stanley Rule & Level Co. 56
Star Bucket & Pump Co. 64
Star Enameling & Stamping Co. 64
Star Expansion Bolt Co. 55
Stark Rolling Mill Co. 49
Stove & Range Co. of Pittsburgh 2
Stuber & Kuek 64
Sturges & Burn Mfg. Co. 53
Sullivan-Geiger Co. 64
Sykes Steel Roofing Co. 53
Symonds Register Co. 14
Tanner & Co. 47
Taylor & Boggis Foundry Co. 56
Tuttle & Bailey Mfg. Co. 15
XXth Century Heat. & Vent. Co. 10
Utica Heater Co. 2
Van Range Co. 4
Vedder Pattern Works 46
Wagner C. DeWitt 48
Walworth Run Foundry Co. 15
Ward-Dickey Steel Co. 64
Warren, J. D. 58
Weiss, H. & Co. 52
Weller Pattern Co. 46
Wheeling Corrugating Co. 47
Whitacre, J. E. Mfg. Co. 64
White & Son Co., Ira F. 60
White Lily Mfg. Co. 58
Willard, Wm. G. 5
Wooden Ventilator Co., The 15
Youngstown Furnace & Supply Co. 13

CLASSIFIED LIST.

Ammunition
Standard Arms Co., Wilmington, Del

Augers—Post Hole
Iwan Bros., South Bend, Ind

Barb Wire
American Steel & Wire Co., Chicago, Ill

Bathroom Fixtures
Buffalo Mfg. Co., Buffalo, N. Y

Bending Machines
Napanee Iron Wks., Napanee, Ind

Boilers—Steam
Boynton Furnace Co., Chicago, Ill
Kellogg-Mackay Co., Chicago, Ill
Magee Furnace Co., Chicago, Ill
Richardson & Boynton Co., Chicago, New York, Boston
Utica Heater Co., Utica, N. Y

Boilers—Wash
Elliott Mfg. Co., Warren, Ill

Boiler Handles
Berger Bros. Co., Philadelphia, Pa

Bolts
Columbus Bolt Works., Columbus, O

Bolts—Expansion
Star Expansion Bolt Co., New York, N. Y

Bolts—Toggle
Star Expansion Bolt Co., New York, N. Y

Boxes—Hardware
Green Co., A. H., New York, N. Y

Brackets
Hessler Co., H. E., Syracuse, N. Y

Brakes—Cornice
Bertsch & Co., Cambridge City, Ind
Niagara Machine & Tool Works, Buffalo, N. Y
Robinson, Mfg. Co., J. M., Cincinnati, O

Brass and Copper
Hussey & Co., C. G., Pittsburg, Pa

Bridle Rings—Enameled, Galvanized and Plain
Star Expansion Bolt Co., New York, N. Y

Brushes
Bromwell Brush & Wire Goods Co., Cincinnati, O

Cable Dogs—Galvanized and Plain
Star Expansion Bolt Co., New York, N. Y

Cans
Elliott Mfg. Co., Warren, Ill
Stuber & Kuek, Peoria, Ill

Can Openers
White & Son, Ira F., Newark, N. J

Carpenters' Tools
Disston & Sons, Henry, Philadelphia, Pa
Griffin Mfg. Co., Erie, Pa
Lawson Mfg. Co., Chicago, Ill
North Bros. Mfg. Co., Philadelphia, Pa
Parker Co., Chas., Meriden, Conn, New York, N. Y
Rock Island Tool Co., Rock Island, Ill
Smith & Hemenway Co., New York, N. Y
Stanley Rule and Level Co., New Britain, Conn

Carriage Forgings
Columbus Bolt Works, Columbus O

Ceilings
Canton Art Metal Co., Canton, O
Canton Mfg. Co., Canton, O
Eller Mfg. Co., Canton, O
Friedley-Voshardt Co., Chicago, Ill
Milwaukee Corrugating Co., Milwaukee, Wis
Mullins Co., W. H., Salem, O
Schoedinger, F. O., Columbus, O
Wheeling Corrugating Co., Wheeling, W. Va

Cement—Roofing
Auld & Conger Co., Cleveland, O
Conners, Wm., Paint Mfg. Co., Troy, N. Y

Cement—Plumbers
Obermayer Co., S., Cincinnati, O

Chimney Tops
Iwan Bros., South Bend, Ind

Chutes—Coal
Majestic Fur. & Fdy. Co., Huntington, Ind

Collar Edging Rolls
Wagner, C. DeWitt, Cedar Rapids, Ia

Conductor Hangers
Berger Bros. Co., Philadelphia, Pa

Conductor Pipe
Canton Art Metal Co., Canton, O
Canton Mfg. Co., Canton, O
Clark, Quien & Morse, Peoria, Ill
Eller Mfg. Co., Canton, O
La Crosse Steel Roof. Co., La Crosse, Wis
Milwaukee Corrugating Co., Milwaukee, Wis
Schoedinger, F. O., Columbus, O

Copper and Brass
Hussey & Co., C. G., Pittsburg, Pa

Core Compound
Obermayer Co., S., Cincinnati, O

Corn Cribs
Denning Wire & Fence Co., Cedar Rapids, Ia

Cornices
Canton Art Metal Co., Canton, O
Canton Mfg. Co., Canton, O
Eller Mfg. Co., Canton, O
Milwaukee Corrugating Co., Milwaukee, Wis

Cornice Brakes
Bertsch & Co., Cambridge City, Ind
Niagara Machine & Tool Works., Buffalo, N. Y
Robinson, Mfg. Co., J. M., Cincinnati, O

Counters
Heller & Co., W. B. Montpelier, O

Crimping Machines
Robinson Mfg. Co., J. M., Cincinnati, O

Cutlery
Smith & Hemenway Co., New York, N. Y
White & Son, Ira F., Newark, N J

Cut Offs—Rain Water
La Crosse Steel Roof. Co., La Crosse, Wis
Milwaukee Corrugating Co., Milwaukee, Wis
Sullivan-Geiger Co., The, Indianapolis, Ind

Dampers
Howes Co., S. M., Boston, Mass
Taylor & Boggis Fdy. Co., Cleveland, O

Door Hangers
Griffin Mfg. Co., Erie, Pa

Door Holders
Caldwell Mfg. Co., Rochester, N. Y

Drills—Star and Pipe
Star Expansion Bolt Co., New York, N. Y.

Drill Holders—Sebco
Star Expansion Bolt Co., New York, N. Y

Eaves Trough
Canton Art Metal Co., Canton, O
Canton Mfg. Co., Canton, O
Eller Mfg. Co., Canton, O
La Crosse Steel Roof. Co., La Crosse, Wis
Milwaukee Corrugating Co., Milwaukee, Wis
Schoedinger, F. O., Columbus, O
Whitacre, J. E. Mfg. Co., Rockford, Ill
Wheeling Corrugating Co., Wheeling, W. Va

Eave Trough Hangers
Canton Mfg. Co., Canton, Ohio

Elbows—Conductor Pipe
Canton Art Metal Co., Canton, O
Canton Mfg. Co., Canton, O
Dieckmann, Ferdinand, Cincinnati, O
Eller Mfg. Co., Canton, O
Milwaukee Corrugating Co., Milwaukee, Wis
Wheeling Corrugating Co., Wheeling, W. Va

Elevators
Kimball Bros Co., Council Bluffs, Ia

Enameled Ware
Elliott Mfg. Co., Warren, Ill
New England, Enameling Co., New York, N. Y
Star Enameling & Stamping Co., Pittsburg, Pa

Fencing—Wire
American Steel & Wire Co., Chicago, Ill
Denning Wire & Fence Co., Cedar Rapids, Ia
Pittsburg Steel Co., Pittsburg, Pa

Files
Carver File Works, Philadelphia, Pa
Disston, Henry & Sons, Philadelphia, Pa

Fire Arms
Standard Arms Co., Wilmington, Del

Fixtures—Store
Warren Mfg. Co., J. D., Chicago, Ill

Flue Stoppers
Stuber & Kuek, Peoria Ill

Food Choppers
Enterprise Mfg. Co. of Pa., Philadelphia, Pa

Forming Rolls
Bertsch & Co., Cambridge City, Ind
Niagara Machine & Tool Works, Buffalo, N. Y

Foundry Supplies
Obermayer, S. Co., Cincinnati, O

Furnace Cement
Connors Paint Mfg. Co., Wm., Troy, N. Y

Furnaces—Hot Air
Boynton Furnace Co., Chicago, Ill
Co-operative Fdy. Co., Rochester, N. Y Chicago, Ill
Graff Furnace Co., New York, N. Y
Green Fdy. & Fur. Wks., Des Moines, Ia
Haynes-Langenberg Mfg. Co., St. Louis, Mo
Henry & Scheible Co., Cleveland, O
Majestic Fur. & Fdy. Co., Huntington, Ind
Monroe Fdy. & Furn. Co., Monroe, Mich
Mt. Penn Stove Works, Reading, Pa
Ralt & Co., Walter S., Chicago, Ill
Richardson & Boynton Co., Chicago New York, Boston
Schwab, R. J. & Sons Co., Milwaukee, Wis
Stove & Range Co. of Pittsburgh, Pittsburgh, Pa
XXth Century Heat. & Vent. Co., Akron, O
Utica Heater Co., Utica, N. Y
Youngstown Furn. & Supply Co., Niles, O

Furnaces—Soldering
Burgess Soldering Fur. Co., Columbus, O
Clayton & Lambert Mfg. Co., Detroit, Mich
Diener Mfg. Co., Geo. W., Chicago, Il
Meyer Fdy. & Mfg. Co., South Bend, Ind

Furnace Pipe and Fittings
Green Fdy. & Furn. Wks., DesMoines, Ia
Michigan Safety Furnace Pipe Co., Detroit, Mich

Furnace Rings
Walworth Run Fdy Co., Cleveland, O

Galvanized Ware
New England Enameling Co., New York, N. Y
Wheeling Corr. Co., Wheeling, W. Va

Gas Machines
Whitacre Mfg. Co., J. E., Rockford, Ill

Gas Stoves
Detroit Vapor Stove Co., Detroit, Mich
Odin Stove Mfg. Co., Erie, Pa
Stove & Range Co. of Pittsburgh, Pittsburgh, Pa

Grain Bins
Denning Wire & Fence Co., Cedar Rapids, Ia

Hardware Jobbers
Clark, Quien & Morse, Peoria, Ill

Hardware Specialties
Bishop Hardware Co., Dowagiac, Mich
Caldwell Mfg. Co., Rochester, N. Y
Enterprise Mfg. Co. of Pa., Philadelphia, Pa
Hessler Co., H. E., Syracuse, N. Y
Smith & Hemenway Co., New York, N. Y
Sturges & Burn Mfg. Co., Chicago, Ill
Taylor & Boggis Fdy. Co., Cleveland, O
White & Son, Ira F. Newark, N. J

Hinges
Griffin Mfg. Co., Erie, Pa
Lawson Mfg. Co., Chicago, Ill

Hollow Ware

Avery Stamping Co., Cleveland, O
Sperry, D. R. & Co., Batavia, Il

Horse Nails

Standard Horse Nail Co., New Brighton, Pa

Horse Shoes

American Steel & Wire Co., Chicago, Il

Hotels

Lenox Hotel, Buffalo, N. Y

Ice Cream Freezers

New England Enameling Co., New York, N. Y
North Bros. Mfg. Co., Philadelphia, Pa
Sturges & Burns Mfg. Co., Chicago, Ill

Iron Enamel

Black Silk Stove Polish Wks., Sterling, Ill
Nickel Plate Stove Polish Co., Chicago, Il

Kitchen Utensils

Avery Stamping Co., Cleveland, O
Buffalo Mfg. Co., Buffalo, N. Y
Elliott Mfg. Co., Warren, Ill
New England Enameling Co., New York, N. Y
Star Enameling and Stamping Co., Pittsburgh, Pa

Ladders—Shelf

Calander, John, St. Paul, Minn

Lard Presses

Enterprise Mfg. Co., of Pa., Philadelphia, Pa

Lawn Mowers

Clipper Lawn Mower Co., Dixon, Ill

Lighting Systems

Detroit Heating & Lighting Co., Detroit, Mich
Whitacre Mfg. Co., J. E., Rockford, Ill

Lightning Rod

Barnett & Co., Jos., Riverside, Ia
Eclipse Wire Fence Co., Lansing, Mich
Electra Lightning Rod Co., Cresco, Ia
Foy, Edw. A. & Co., Cincinnati, O
Maher & Son Lightning Rod Co., Preston, Ia

Metal—Perforated

Harrington & King Perforating Co., Chicago, Ill

Metal Polish

Black Silk Stove Polish Wks., Sterling, Ill
Nickel Plate Stove Polish Co., Chicago, Ill

Metal Shingles

ton Art Metal Co., Canton, O
waukee Corrugating Co., Milwaukee, Wis
Sheet Metal Roofing Co., Jersey City, N. J

Mica

Brauer Supply Co., A. G., St. Louis, Mo
Munsell & Co., Eugene, Chicago, Ill

Milk Cans

Sturges & Burn Mfg. Co., Chicago, Ill

Milk Pails

Illiott Mfg. Co., Warren, Ill

Miters

Whitacre, J. E. Mfg. Co., Rockford, Ill

Nails and Tacks—Copper

Hussey & Co., C. G., Pittsburgh, Pa
Keystone Nail Co., Pittsburgh, Pa

Nuts

Columbus Bolt Works, Columbus, O

Ovens

Detroit Vapor Stove Co., Detroit, Mich

Paints and Paint Specialties

Connors, Wm., Paint Mfg. Co., Troy, N. Y
Dixon, Jos. Crucible Co., Jersey City, N. J

Pencils

Dixon, Jos. Crucible Co., Jersey City, N. J

Perforated Metal

Harrington & King Perforating Co., Chicago, Ill

Pipe—Furnace

Michigan Safety Furnace Pipe Co., The Detroit, Mich

Plungers

Berger Bros. Co., Philadelphia, Pa

Post Hole Diggers

Iwan Mfg. Co., South Bend, Ind

Pumps

Star Bucket Pump Co., St. Louis, Mo

Punches

Armstrong-Blum Mfg. Co., Chicago, Ill
Bertsch & Co., Cambridge City, Ind
Napanee Iron Works, Napanee, Ind
Niagara Machine & Tool Works, Buffalo, N. Y
Robinson Mfg. Co., J. M., Cincinnati, O
Weiss & Co., H., New York, N. Y

Putty—Stove

Connors, Wm., Paint Mfg. Co., Troy, N. Y

Radiators

Kellogg-Mackay Co., Chicago, Ill

Rasps

Disston, Henry & Sons., Philadelphia, Pa
Carver File Works., Philadelphia, Pa

Rat Traps

Bromwell Brush & Wire Goods Co., Cincinnati, O

Razors

Smith & Hemenway Co., New York, N. Y

Registers

Ferrosteel Co., Cleveland, O
Henry & Scheible Co., Cleveland, O
Schwab & Sons Co., Milwaukee, Wis
Symonds Register Co., St. Louis, Mo
Tuttle & Bailey Mfg. Co., New York, N. Y
Walworth Run Fdy Co., Cleveland, O

Rivets

Columbus Bolt Works, Columbus, O

Roasters

Wheeling Corrugating Co., Wheeling, W. Va

Roofers' Supplies

Auld & Conger Co., Cleveland, O

Roofing—Iron and Steel

American Sheet & Tin Plate Co., Pittsburgh, Pa
Canton Art Metal Co., Canton, O
Canton Mfg. Co., Canton, O
Eller Mfg. Co., Canton, O
Follansbee Bros. Co., Pittsburgh, Pa
Friedley & Voshardt, Co. Chicago, Ill
Griffiths Charcoal Iron Mills, Washington, Pa
Inland Steel Co., Chicago, Ill
LaCrosse Steel Roof. Co., LaCrosse, Wis
Milwaukee Corrugating Co., Milwaukee, Wis
Nat'l Sheet Metal Roof. Co., Jersey City, N. J
Schoedinger, F. O., Columbus, O
Stark Rolling Mill Co., Canton, O
Sykes Steel Roofing Co., Chicago, Ill
Tanner & Co., Indianapolis, Ind
Wheeling Corrugating Co., Wheeling, W. Va

Roofing Cement

Auld & Conger Co., Cleveland, O
Connors Paint Mfg. Co., The Wm., Troy, N. Y

Roof Paint

Dixon, Jos. Crucible Co., Jersey City, N. J

Rules

Lufkin Rule Co., Saginaw, Mich

Sash Balances

Pullman Mfg. Co., Rochester, N. Y

Sausage Stuffers

Enterprise Mfg. Co., of Pa., Philadelphia, Pa

Saw Sets and Saws

Disston, Henry & Sons, Philadelphia, Pa
Smith & Hemenway Co., New York, N. Y

Schools—For Sheet Metal Pattern Drafting

Gray's School, New York, N. Y

Screens—Perforated Metal

Harrington & King Perforating Co., Chicago, Ill

Screws

Columbus Bolt Works, Columbus, O

Screw Drivers

North Bros. Mfg. Co., Philadelphia, Pa

Shears

Bertsch & Co., Cambridge City, Ind
Napanee Iron Works, Napanee, Ind
Robinson Mfg. Co., J. M., Cincinnati, O
Wagner, C. DeWitt, Cedar Rapids, Ia

Sheets—Black and Galvanized

American Sheet & Tin Plate Co., Pittsburgh, Pa
Griffiths Charcoal Iron Mills, Washington, Pa
Inland Steel Co., Chicago, Ill
Sykes Steel Roofing Co., Chicago, Ill
Stark Rolling Mill Co., Canton, O
Tanner & Co., Indianapolis, Ind
Wheeling Corrugating Co., Wheeling, W. Va

Sheets—Planished

American Sheet & Tin Plate Co., Pittsburgh, Pa
Follansbee Bros., Pittsburgh, Pa
Griffiths Charcoal Iron Mills, Washington, Pa
Inland Steel Co., Chicago, Ill
Stark Rolling Mill Co., Canton, O
Sykes Steel Roofing Co., Chicago, Ill
Tanner & Co., Indianapolis, Ind
Ward-Dickey Steel C o., Indiana Harbor, Ind

Sheets—Steel

American Sheet & Tin Plate Co., Pittsburgh, Pa
American Steel & Wire Co., Chicago, Ill
Follansbee Bros. Co., Pittsburgh, Pa
Griffiths Charcoal Iron Mills, Washington, Pa
Inland Steel Co., Chicago, Ill
Stark Rolling Mill Co., Canton, O
Sykes Steel Roofing Co., Chicago, Ill
Tanner & Co., Indianapolis, Ind

Sheet Metal Ornaments

Friedley-Voshardt Co., Chicago, Ill
La Crosse Steel Roofing and Corrugating Co., La Crosse, Wis
Milwaukee Corrugating Co., Milwaukee, Wis
Mullins Co., W. H., Salem, O
Schoedinger, F. O., Columbus, O

Shelf Boxes

Green & Co., A. H., New York, N. Y

Shelving

Heller & Co., W. B., Montpelier, O
Warren Mfg. Co., J. D., Chicago, Ill

Shovels

Avery Stamping Co., Cleveland, O

Siding

Milwaukee Corrugating Co., Milwaukee, Wis

Sifters

Stuber & Kuck, Peoria, Ill

Skylights

Canton Art Metal Co., Canton, O
Eller Mfg. Co., Canton, O
Milwaukee Corrugating Co., Milwaukee, Wis
Sykes Steel Roofing Co., Chicago, Ill

Skylight Gearing

Weiss, H. & Co., New York, N. Y

Slate Roofing

Auld & Conger Co., Cleveland, O

Slating Nails

Hussey & Co., C. G., Pittsburgh, Pa

Soldering Fluxes

Ruby Chemical Co., Johnston, Ohio

Squares—Machinists'

Disston, Henry & Sons, Philadelphia, Pa

Stampings—Sheet Metal

Avery Stamping Co., Cleveland, O

Statuary

Mullins Co., W. H., Salem, O

Steel

American Steel & Wire Co., Chicago, Ill

Store Fixtures

Heller & Co., W. B., Montpelier, O

Stoves and Ranges

Albany Foundry Co., Albany, N. Y
Champion Steel Range Co., Cleveland, O
Co-operative Fdy Co., Rochester, N. Y
Faultless Malleable Stove Works, Chicago, Ill
Monitor Stove & Range Co., St. Charles, Ill
Mt. Penn Stove Works, Cincinnati, O
Odin Stove Mfg. Co., Reading, Pa
Quality Stove & Range Co., Erie, Pa.
Sill Stove Works, Belleville, Ill
Smith & Anthony Co., Rochester, N. Y
Stove & Range Co., of Pittsburgh, Boston, Mass
Van Range Co., John, Pittsburgh, Pa
Willard, Wm. G., Cincinnati, O
St. Louis, Mo

Stove Mats

Stuber & Kuck, Peoria, Ill

Stove Patterns

Cleveland Castings Pattern Co., Cleveland, O
Cope Pattern, Geo. W., Works, Detroit, Mich
Quincy Pattern Co., Quincy, Ill
Vedder Pattern Works, Troy, N. Y
Weller Pattern Co., Quincy, Ill

Stove Pipe

Hemp & Co., St. Louis, Mo

Stove Pipe Thimbles

Stuber & Kuck, Peoria, Ill

Stove Polish

Black Silk Stove Polish Wks., Sterling, Ill
Brauer Supply Co., A. G., St. Louis, Mo
Nickel Plate Stove Polish Co., Chicago, Ill

Stove Putty

Connors Paint Mfg. Co., Wm., Troy, N. Y
Dixon, Jos. Crucible Co., Jersey City, N. J

Stove Repairs

Brauer, A. G., Supply Co., St. Louis, Mo.

Sugar Kettles

Sperry, D. R. Co., Batavia, Il

Supplies—Foundry

Obermayer Co., S., Cincinnati, O

Supplies—Stove Dealers'

Brauer, A. G., Supply Co., St. Louis, Mo

Tapes

Lufkin Rule Co., Saginaw, Mich

Technologist

Hooper, C. N., Dubuque, Iowa

Thermometers—Oven

Evans Stamping & Plating Co., Taunton, Mass

Tin—Perforated

Harrington & King Perforating Co., Chicago, Ill

Tinners' Furnaces

Burgess Soldering Fur. Co., Columbus, O
Clayton & Lambert Mfg. Co., Detroit, Mich
Diener Mfg. Co., Geo. W., Chicago, Ill
Meyer Fdy. & Mfg. Co., South Bend, Ind

Tinners' Tools

Armstrong, Blum Mfg. Co., Chicago, Ill
Auld & Conger Co., Cleveland, O
Berger Bros. Co., Philadelphia, Pa
Bertsch & Co., Cambridge City, Ind
Lufkin Rule Co., Saginaw, Mich
Napanee Iron Works, Napanee, Ind
Niagara Machine & Tool Works, Buffalo, N. Y
Robinson Mfg. Co., J. M., Cincinnati O
Wagner, C. DeWitt, Cedar Rapids, Ia
Weiss & Co., H., New York, N. Y

Tinplate

American Sheet & Tin Plate Co., Pittsburgh, Pa
Eller Mfg. Co., Canton, O
Follansbee Bros. Co., Pittsburgh, Pa
Merchant & Evans Co., Philadelphia, Pa
Wheeling Corrugating Co., Wheeling, W. Va

Tinware

New England Enameling Co., New York, N. Y

Tinware Trimmings

Berger Bros. Co., Philadelphia, Pa

Toggles—All Kinds

Star Expansion Bolt Co., New York, N. Y

Tools, etc.

North Bros. Mfg. Co., Philadelphia, Pa
Parker Co., Chas., Meriden, Conn
Rock Island Tool Co., New York, N. Y
Stanley Rule & Level Co., Rock Island, Ill
New Britain, Conn

Tools—See Carpenters' Tools
Tools—Linemen's

Smith & Hemenway Co., New York, N. Y

Trowels

Avery Stamping Co., Cleveland, O
Disston, H. & Sons, Inc., Philadelphia, Pa
Griffin Mfg. Co., Erie, Pa

Tubing—Heavy Tin

Dieckmann, Ferdinand, Cincinnati, O

Ventilators—Wooden

Wooden Ventilator Co., The, East Palestine, O

Ventilators

Canton Art Metal Co., Canton, O
Canton Mfg. Co., Canton, O
Eller Mfg. Co., Canton, O
Friedley & Voshardt Co., Chicago, Ill
Globe Ventilator Co., Troy, N. Y
Iwan Mfg. Co., South Bend, Ind
Merchant & Evans Co., Philadelphia, Pa
Milwaukee Corrugating Co., Milwaukee, Wis

Vises

Parker Co., Chas., Meriden, Conn
Rock Island Tool Co., New York, N. Y
Rock Island, Ill

Washers

Columbus Bolt Works, Columbus, O

Washing Machines

Brammer Mfg. Co., H. F., Davenport, Ia
White Lily Mfg. Co., Davenport, Ia

Water Coolers

Buffalo Mfg. Co., Buffalo, N. Y

Wire

American Steel & Wire Co., Chicago, Ill
National Wire Cloth Co., Niles, Mich.

Wire Goods

Bromwell Brush & Wire Goods Co., Cincinnati, O
Denning Wire & Fence Co., Cedar Rapids, Ia
National Wire Cloth Co., Niles, Mich
Pittsburg Steel Co., Pittsburgh, Pa

Wants and Sales

For Paid Yearly subscribers THE AMERICAN ARTISAN will insert under this head advertisements of six lines WITHOUT CHARGE for employers wishing to secure employes, persons seeking situations, parties desiring to purchase a business, business for sale, partners wanted, to exchange, etc. Those who respond to these announcements will please mention that they "READ THE ADVERTISEMENT IN THE AMERICAN ARTISAN."

BUSINESS CHANCES.

PATENTS OFFICIAL copy "PATENT LAWS" United States sent on receipt ten cents stamps.
HUBERT E. PECK, Patent Attorney, 629 F Street, Washington, D. C.

For Sale—Hardware store, established 34 years, doing mostly cash business. Located in heart of town. Good clean stock. Can be had at a profitable investment if taken soon. Reason for selling, wish to retire. Address B. B. Myers, Nevada, Ohio. 21-3t

For Sale—Tinshop, furnace and roofing business in northern Ohio town of 50,000 population. Best location and good business. Address S-2, care THE AMERICAN ARTISAN, 355 Dearborn St., Chicago. 21-3t

For Sale—Shop lot tinner's and pipe fitter's tools. Address George Zepf, Lexington, Nebraska. 21-3t

For Sale—$6,000 to $8,000 stock of hardware in one of the best towns of 1,500 inhabitants in North Central Indiana. Business well established. Will take cash to make the deal. Lack of capital reason for selling. Address P-98, care THE AMERICAN ARTISAN, 355 Dearborn St., Chicago. 21-3t

For Sale—Clean, up-to-date stock of hardware, heating and plumbing goods, tinshop tools and fixtures, located in one of Iowa's best towns and snap to parties looking for good location. Cash only. No trade considered. Address P-90, care THE AMERICAN ARTISAN, 355 Dearborn St., Chicago. 20-3t

Cobden, Illinois, in great need of hardware and furniture store. Greatest shipping point of fruits and vegetables between Chicago and New Orleans. Some inducement. Address Williams New Opera House, Cobden, Illinois. 20-3t

For Sale—Stock of hardware, also tinshop. Invoice about $2,500. Established two years ago. Must sell on account of death of owner. Address Mrs. L. G. Schultz, North Fond du Lac, Wisconsin. 20-3t

For Sale—Well established tin, jobbing and furnace shop. Employ two to six men. Will invoice about $800. Is first-class opening for tinner? Have run the shop nine years. Reason for selling is failing health. Address T. R. Freeman, 229 S. Main Ave., Sioux Falls, South Dakota. 20-3t

Wanted—Stock of hardware and stoves for good, black land Texas farm. Address Box 333, Clarksville, Texas. 20-3t

Fore Sale: Small department store with tin shop in connection. Also six-room residence in good railroad town of 3,200 inhabitants. Price about $1,600. Would sell the business separately. Address G. J. Sturm, Flora, Illinois. 19-3t

For Sale: Half interest in good paying hardware and plumbing business. This is good clean proposition and will stand investigation. Address P-85, care THE AMERICAN ARTISAN, 355 Dearborn St., Chicago. 19-3t

Will Trade: Improved farm for good clean stock of hardware of $5,000 to $7,000. Farm two miles from town. Norwegian settlement. Address Halverson & Vickerman, Revillo, South Dakota. 19-3t

For Sale: Stock of hardware, tinshop with plumbing fittings and tools. Only stock in good farming country. Invoices $2,000 and may be increased profitably. Rent reasonable and at present have three jobs of bathroom fittings to put in. Plenty of furnace and hot water work. Good chance for tinner with small capital. Will sell part cash if wanted. Address P-88, care THE AMERICAN ARTISAN, 355 Dearborn St., Chicago. 19-3t

TINNER'S TOOLS.

For Sale: Full set of tinners' tools. For prices address August Young, Bancroft, Iowa. 19-3t

For Sale—Set of tinner's tools in fair shape at low price. Address H. F. Dallman, Clinton, Wisconsin. 21-3t

Wanted—One 8-foot cornice brake and one squaring shear. Must be cheap for cash. Give description and lowest cash price in first letter. Address H. H. H., Lock Box 87, Shannon City, Iowa. 21-3t

Wanted to Purchase — One Hulbart double seamer. Must be in good condition and cheap for cash. Address Grant Stricker, Laura, Ohio. 21-3t

For Sale—8-foot double truss cornice brake in good condition. Address L. J. Beuret, Auburn, Indiana. 20-3t

For Sale—One double wood truss brake in first-class condition. Inquire of Rudge & Guenzel Co., Lincoln, Nebraska. 20-3t

HELP WANTED.

Wanted—Office and warehouse clerks for wholesale hardware establishment; those with high school education and retail hardware experience preferred. Good opportunity. Address S-3, care THE AMERICAN ARTISAN, 355 Dearborn St., Chicago. 21-3t

Wanted—First-class tinner. Steady job to good all around man. Address Wolff, Kubly & Hirsig, 401 W. Gilman St., Madison, Wisconsin. 21-3t

Wanted—Good tinner and plumber; one capable of doing furnace and hot water heating. Good wages and steady job to the right man. Address Hunter Brothers, Cando, North Dakota. 21-3t

Wanted—Good reliable tinner and furnace man. Good wages and steady place for sober mechanic. Address J. W. Dutton, 2011 "O" St., Lincoln, Nebraska. 21-3t

Wanted—Tinner. Good man for in and outside work. Wages right. Address C. F. Warning Sheet Metal Works, Oshkosh, Wisconsin. 21-3t

Wanted — Two men accustomed to working on creamery and dairy supplies. Address Charles Skidd, Kenosha, Wisconsin. 21-3t

Wanted—Good tinner at once, one that understands some plumbing and heating work. Steady job the year around. Will pay good wages to right man. Address Kelley Plumbing Co., Aberdeen, South Dakota. 21-3t

Good Tinner Wanted—Steady job and good wages. Address J. P. Lynott, Louisiana, Missouri. 21-3t

Wanted—First-class all around tinner to do general inside and outside tinning. Must be experienced in cutting patterns for general work, sober and reliable. No "would-be" need apply. When writing state wages wanted. Address P-100, care THE AMERICAN ARTISAN, 355 Dearborn St., Chicago. 21-3t

Wanted—First-class sheet metal worker; 8 hours' work; steady job for right man. Address Barrett Hardware Co., Joliet, Illinois. 21-3t

Wanted—Good reliable tinner at once, who understands heating, some plumbing, also steel ceiling work. Steady work. State wages. Address John Stallman, Sioux Falls, South Dakota. 21-3t

Wanted, Tinner and Plumber—To run my shop for one year. Can make good money. Will either lease or divide profits. $200 cash required. Address Charles Hahn, Mandan, North Dakota. 21-3t

Wanted, Business Partner—Union man; A1 good tinner, sober and willing to push, to take half interest. Tools not included unless party wishes to buy interest in same. Must have $150 to $200. Have an excellent business now, with prospects for more. Address Smith Bros., Box 432, Victor, Colorado. 21-2t

Wanted—Good all around sheet metal worker; one who can do pipe work and plumbing. Steady job at $15 per week. Must be temperate and reliable. Address F. N. Hollister, Sabetha, Kansas. 21-3t

Wanted—First-class man to clerk in hardware store. One who understands the business. Must be reliable and furnish best of references. Address P-92, care THE AMERICAN ARTISAN, 355 Dearborn St., Chicago. 20-3t

Wanted — First-class tinners; good wages to the right men. Address Zimmerman & Osborn, Beloit, Wisconsin. 21-3t

Wanted—Good all around sheet metal workers. Address Guthrie Sheet Metal Works, 122 N. First St., Guthrie, Oklahoma. 20-3t

Wanted—First-class all around tinner. Must be steady and reliable. Steady work all year around at good wages. When answering please state wages wanted, etc. Address P-93, care THE AMERICAN ARTISAN, 355 Dearborn St., Chicago. 20-3t

Wanted—Good all around tinner and plumber. Must be steady and reliable for Illinois town of 1,500. Can give good man steady work and good wages. State experience and wages wanted. Address P-91, care THE AMERICAN ARTISAN, 355 Dearborn St., Chicago. 20-3t

Wanted—Two all around tinners and furnace men. Good wages. Steady work. Address Macomb Sheet Metal Works, Macomb, Illinois. 20-3t

Wanted—First-class sheet metal, cornice, furnace man and pattern cutter. Good wages and steady job for the right man. City of 60,000 or 65,000 inhabitants. Address Rudge & Guenzel Co., Lincoln, Nebraska. 20-3t

Wanted, Shop Foreman: Must be strictly sober and reliable. One who thoroughly understands the furnace business. This is a mighty good opening for some good, live man. Address The Crow-Wynn Heating Co., Cleveland, Ohio. 19-ufn

Wanted, Good Tinner at Once: One that understands some plumbing and heating work. Steady job. State wages you can earn in your reply. Address G. T. Mueller & Son, Columbus, Wisconsin. 19-3t

Wanted: All-around tinner and plumber, who is able to do steam, hot water and hot air heating work. Steady job the year around. Only good, reliable man need apply. State experience and wages wanted in first letter. Address Emmetsburg Hardware Co., Emmetsburg, Iowa. 19-3t

Wanted: All-around tinner for in and outside work. Steady work the year around to the right man. Must be sober and a mechanic. Address Peter Feller, Kaukauna, Wisconsin. 19-3t

Wanted: Ten men accustomed to laying tin and galvanized roofing. Wages 35c per hour. 10 hours per day. Address Chas. Skidd, Kenosha, Wisconsin. 19-3t

Wanted: Traveling salesmen visiting tinners, roofers and cornice workers, to carry our stay gutter hanger as side line. Liberal commission. State territory covered. Address The Horan Stay Hanger Co., Louisville, Kentucky. 19-3t

SITUATIONS WANTED.

Situation Wanted—By experienced tinner of fourteen years' experience. Married man, no boozer and reliable. Can furnish best of references. Have been foreman in shop for seven years. Texas, Oklahoma or California preferred. Address P-101, care THE AMERICAN ARTISAN, 355 Dearborn St., Chicago. 21-3t

Situation Wanted—By competent tinner, in Colorado, Idaho or Montana. Capable of doing first-class job of plumbing and heating. Can refer to present employers as to character and ability. Address Nelson, care of Osakis Hardware Co., Osakis, Minnesota. 21-2t

Situation Wanted — First-class all around sheet metal worker, age 38, city and country experience and competent to take charge of shop. Wishes to make change in June. Give full particulars in first letter. Address P-97, care THE AMERICAN ARTISAN, 355 Dearborn St., Chicago. 21-3t

Wanted, Situation—By tinner; two years' experience. Address P-95, care THE AMERICAN ARTISAN, 355 Dearborn St., Chicago. 20-3t

Situation Wanted—By first-class tinsmith and plumber with 18 years' experience; sober and reliable. Town of 3,000 or larger preferred. Address P-94, care THE AMERICAN ARTISAN, 355 Dearborn St., Chicago, Illinois. 20-3t

Situation Wanted: By young man 22 years old. Have had four years' experience as hardware clerk and can do some tinning and repair work. Address L. T. R. Greenhalgh, LaValle, Wisconsin. 19-3t

Situation Wanted: By young tinsmith with experience in all lines and can do some plumbing. Steady position wanted. Prefer Illinois or Indiana. Understand the hardware business. State wages. Address P-85, care THE AMERICAN ARTISAN, 355 Dearborn St., Chicago. 19-3t

Situation Wanted: With some good, reliable firm by sheet metal worker having experience in cornice, tin and furnace work, slating and metal ceilings. Am all-around man and have some experience in detail work and pattern cutting. Forty years old, have been at the trade for 22 years and of moral habits. Chicago or Indianapolis preferred. Address P-87, care THE AMERICAN ARTISAN, 355 Dearborn St., Chicago. 19-3t

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BUSINESS OPPORTUNITY.

Canadian Furnace and Stove Foundry is open to increase working capital. Centrally located. Modern plant. Up-to-date line of patterns and good connections. Investor who is experienced foundryman preferred. Reply to Canada, care THE AMERICAN ARTISAN, 355 Dearborn Street, Chicago. 21

WANTED

Stove Salesman for **South Dakota, Southern Minnesota** and **Northern Iowa**, by concern manufacturing a complete line of stoves and ranges. Address W 15, care THE AMERICAN ARTISAN, 355 Dearborn Street, Chicago. 21—nc

WANTED.

First-class salesman to sell goods to the Hardware Jobbing trade, one who is thoroughly familiar with soldering furnaces preferred. State age, experience, habits and send name and address of last two employers. Meyer Foundry and Manufacturing Company, South Bend, Indiana. 21-3t.

BUSINESS CHANCE.

Excellent territory and unlimited possibilities for good money for handling steel range lines. Address C. Franz, 545 South Scott Street, South Bend, Indiana. 21-4t.

FOR SALE—TOOLS.

Tinners', Plumbers' and Pump Tools, Pump, Plumbing and Tin Shop Stock. As a whole or a part. Bargain at once. Good will and business with above if wanted. Address W-9, care THE AMERICAN ARTISAN, 355 Dearborn Street, Chicago. 21-ufn.

WANTED.

Salesmen calling on the Furnace and Hardware trade to sell our Automatic furnace heat regulator on liberal commission. Exclusive contract for territory not yet taken. Write at once stating line and territory. F. D. Kees Manufacturing Company, Beatrice, Neb. 21-1t.

WANTED

A first-class stove salesman. One who can command trade in Northeast Iowa and Southern Minnesota to sell a well-known trade marked line. Address "High Grade," care THE AMERICAN ARTISAN, 355 Dearborn Street, Chicago. 21-4t.

WANTED

A wide awake retail dealer in Chicago to represent the Gschwind Furnace Company of Canton, Ohio. Liberal proposition. Send for catalogue. The Gschwind Furnace Company, Canton, Ohio.

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Black Silk Air Drying Iron Enamel

Same quality as Black Silk Stove Polish, and is used on Gas Stoves, Registers, Stove Pipes, Grates, Fenders, Mantels, in fact, for any purpose where a glossy and permanent enamel is desired. Put up in half pint friction top cans; brush with each can.

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Black Silk Stove Polish Works. Sterling. Ill.

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NEW INVENTION

Cooks any food in any vessel with one kettle. If you want all the profits on this in America write NOW to **J. MARSH. "The Briars," Upminster, England.**

WANTED

Manufacturers or jobbers agency line for Oklahoma territory. Address "Jobber," care of THE AMERICAN ARTISAN, 355 Dearborn Street, Chicago. 21-ufn.

STOVE SALESMAN

With experience wanted for NEBRASKA, by old established trademark house. Give full particulars in first letter. W 11, care THE AMERICAN ARTISAN, 355 Dearborn Street, Chicago. 21—nc

STOVE SALESMAN

wanted to fill unexpected vacancy in TEXAS, for leading stove manufacturing concern. Address, with full particulars, STOVES, care THE AMERICAN ARTISAN, 355 Dearborn Street, Chicago. 21—nc

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500 County Rights given away to advertise best Cistern Filter ever invented. Small working capital required. SANITARY FILTER CO., Bristol, Tenn. 21-2t

WANTED

By a large stove manufacturing concern who contemplates manufacturing Hot Water Boilers and Furnaces, a man who is thoroughly familiar with both the manufacture and selling of these articles. Must be thoroughly practical and able to take charge of plant. Address, Manufacturer, care THE AMERICAN ARTISAN, 355 Dearborn Street, Chicago. 19-3t

For Sale

An Ohio Corporation manufacturing Warm Air Furnaces, incorporated for $10,000 has 25 shares of stock to sell to up-to-date furnace men. This Company is composed principally of heating men located at different points. This Company's affairs will bear the closest scrutiny. The stock is clean and "dry". Shares $100 each. Address W8, care THE AMERICAN ARTISAN, 355 Dearborn Street, Chicago. 18-4t.

Wanted

Traveling salesmen for State of Iowa by manufacturer of enamelware and tinware. State salary expected and name references. None but experienced and well acquainted with the territory considered. Address Salesman, care THE AMERICAN ARTISAN, 355 Dearborn Street, Chicago.

For Sale

A clean and up-to-date stock, consisting of hardware, stoves, ranges, harness, paints and oils and tin shop in connection. Stock will invoice about $4,000.00, yearly sales $15,000.00. This is a rare opportunity for someone wishing to enter hardware business to take up an established business with little competition in town of 500, surrounded by the best farming land in Central Illinois. We also wish to sell our store buildings. For additional information address W-3, care THE AMERICAN ARTISAN, 355 Dearborn Street, Chicago. 14-ufn.

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One in which the profits are large and the chances of success exceptional. I also know of many good openings for retail stores which I will be glad to tell you of, if you will write me to-day. EDWARD B. MOON, 13 West Randolph St., Chicago.

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OF EVERY DESCRIPTION AND FOR ALL PURPOSES
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Twelve sizes always in stock.

Full measure, guaranteed perfect, original patterns, with metal distributed where it is needed. Many Caldrons are made from our casting as patterns. They are inferior to originals, as they have light bottoms and heavy sides and hold less.

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Vedder Pattern Works, Troy, N.Y.
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DESIGNS and ESTIMATES FURNISHED FOR ALL KINDS OF STOVE PATTERNS
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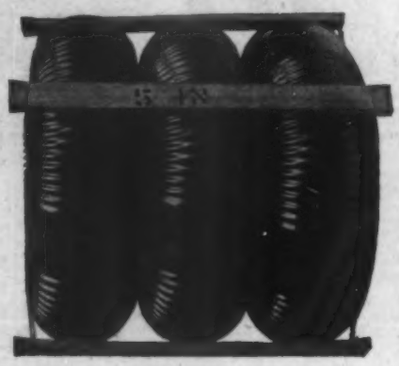

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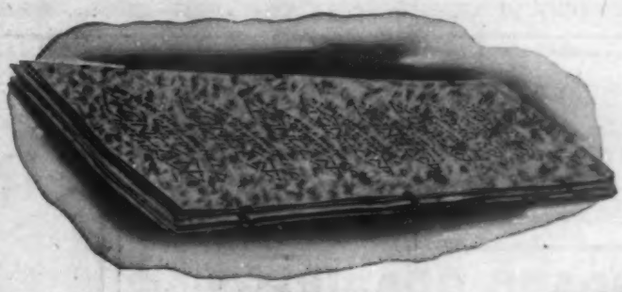

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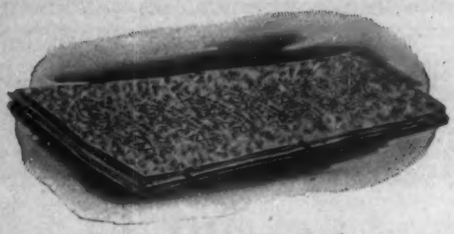

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It will heat irons more than twice as fast as any other furnace.

It can be regenerated while in full operation.

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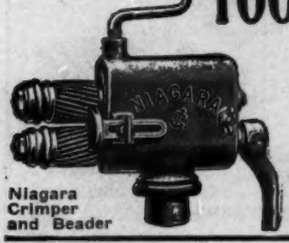

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PORTABLE PUNCH No. 20

Made entirely of STEEL

Punches ¼ in. hole in ¼ in. and equivalent

Let us send you one on trial.

Write for circular and price of this and other Marvel Punches and Shears.

ARMSTRONG-BLUM MFG. CO.
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100 Tinners' Patterns

Complete for **$1.00**

Sent Postpaid on Receipt of Price.

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Plecker's *Corrugated* Expanding *Conductors*

Have no Cross Seams. Made of Galvanized Iron in ten-foot lengths.

Will not burst when full of ice.

CLARK, QUIEN & MORSE, PEORIA, ILL.

The "TORRID" Square Furnace

The most economical and hottest on the market. Noiseless, odorless and smokeless in operation. Our No. 10 has the greatest range in heating of any furnace made, namely 3 to 18 pound coppers, indoors or on a roof in cold and windy weather. Order of your jobber, or we will ship direct for $6.50, on 30 days approval.

GEO. W. DIENER MFG. CO.
77-83 West Lake St., Chicago

Here is Your Opportunity

A Three Months' Course in Sheet Metal Pattern Drafting for $5.00

Consisting of the first fifteen full size school drawings 15x20 inches with instructions, covering CONICAL work, ELBOWS, ANGLES, and OFFSETS, GUTTER MITERS, SQUARE AND ANGLE RETURN CORNICE MITERS, SQUARE AND ANGLE FACE MITERS, by short easy methods.

The foundation of Pattern Cutting is gotten from this Three Months' Trial Course

Cut out this coupon and send us with $5.00 and the fifteen drawings and instructions will be sent you by express prepaid.

—ADDRESS—

GRAY'S SCHOOL, 1028 Jackson Ave., New York

Please send to the following address (3) months' drawings and instructions, enclosed find $5.00 payment in full for same.

Name ..... Street .....

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When writing please mention THE AMERICAN ARTISAN.

THE VICTOR PUNCH, SHEAR and BENDING MACHINE

Most Compact, Economical and Easily Operated

Used by Railroads, Manufacturers and Hardwares

Made in seven sizes

NAPPANEE IRON WORKS, NAPPANEE, IND.

THINK TWICE

before you put in a new stock of Milk Cans. Don't buy the same line you've always carried just on that account.

You want the can on which you can make the best profit in the long run.

You want the can that will be sure to satisfy your customer.

Look for the best can that you can find

THEN BUY STURGES MILK CANS.

You'll sell more of them because your customers demand the can that is easiest to clean and that will stand many years of handling.

There are no poorly soldered seams in Sturges Cans to scratch hands and harbor germs, they're as smooth as glass.

They are built by skilled labor, of the best steel plate and heavily tinned and retinned, in our own factory.

Send for Free Catalog 75 before you order.

STURGES & BURN MFG. CO.

Factory—Harrison, Green and Peoria Streets.
Office—235 So. Green Street,
CHICAGO, ILL.

TREADLE SHEAR

This Treadle Gap Shear is made in all standard sizes for No. 14 and lighter gauge sheets. With it, sheets can be squared, trimmed or slit. We make a complete line of shears, punches and bending rolls, all sizes, for hand or belt drive.

Write for Catalog "F."

BERTSCH & COMPANY
CAMBRIDGE CITY, IND.

Metal Roofing and Siding.
Corrugated Sheets, painted or galvanized.
Metal Window Frames and Sash Glazed with wired glass.
Skylights.
Skylight Gearing.

Price list and estimates furnished upon request.

Sykes Steel Roofing Co.
108-120 West 19th Place
CHICAGO, ILL.

Great Assortment of

Ears, Knobs and Handles

Leading Supply House in America for this class of goods.
Ask for Samples, catalog and prices.

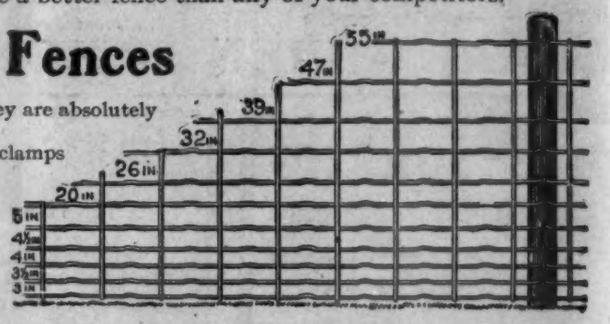
BERGER BROS. CO., Manufacturers

Warerooms and Factory: 100 to 114 Bread Street
PHILADELPHIA.

For a Bigger Fence Business

It is absolutely necessary that you handle a better fence than any of your competitors.

"Pittsburgh Perfect" Fences



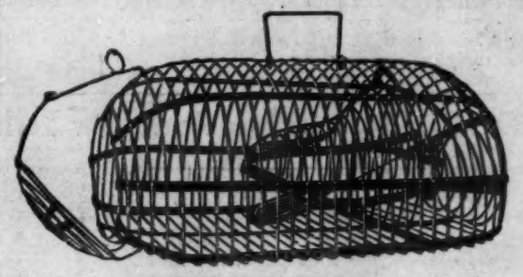
are so far ahead of any other on the market that they are absolutely without competition.

This fence is **Electrically Welded**—it has no wraps or clamps to hold moisture and **cannot rust.** It is the strongest fence made and will curb the most powerful beasts. It can be adjusted to uneven ground—as a perfect fence it is in a class by itself.

WRITE US FOR PARTICULARS TODAY

PITTSBURGH STEEL CO., Pittsburgh, Pa.

We Make More Rat Traps Than Any Other Makers in the World.



ALL LOCKED RIBBED

Five Sizes. Steel Wire and Ribs. Patent Flange, Safety Doors. All Traps Lacquered. Rust Proof. Traps always set. Rats cannot escape when in the Trap. Strongest, best made, most salable Traps in the Market.

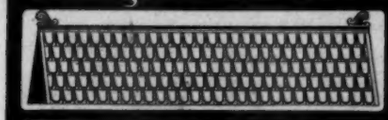
WRITE FOR 1909 CATALOGUE

We make all kinds of Brushes and Wire Goods. Started in 1819 and still at it. GET OUR PRICES.

THE BROMWELL BRUSH AND WIRE GOODS CO., CINCINNATI, OHIO.

WALTERS'

Shingles that last



Made from Galvanized Tin and Painted Tin

Storm, Rust and Fire Proof

Do you want to increase your business? This is your opportunity. Write for catalogue, samples and prices.

National Sheet Metal Roofing Co.
JERSEY CITY, N. J.

We Manufacture 12 and 14 Mesh

ALUMINOID

in all widths made of 33 wire.

Heavy in 28 wire.

SEND FOR SAMPLES.

NATIONAL WIRE CLOTH CO., Niles, Mich.

NAILS THAT NEVER RUST

KEYSTONE BRAND GALVANIZED NAILS

CUT OR WIRE

Evenly Coated Perfectly Separated

KEYSTONE NAIL CO., Pittsburgh, Pa.

Send for Catalogue and Prices.

WRITE FOR PRICES

on

ROOFING SLATE

THE AULD & CONGER CO.

Manufacturers and Dealers

999 Prospect Street
CLEVELAND, OHIO

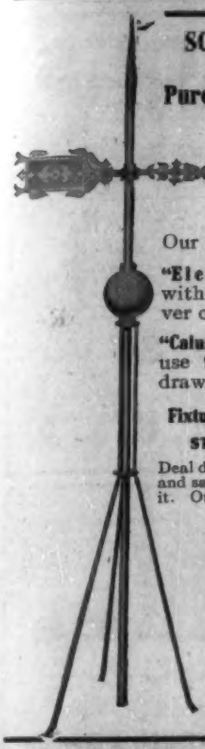
IT WILL PAY YOU

to illustrate your advertisements in your local papers. A sheet of comic advertising cuts sent on application.

These cuts are furnished with catch lines showing their application to the hardware, stove and tinners' trades.

Address

DANIEL STERN, 355 Dearborn St., Chicago



SCIENTIFICALLY MADE
Pure Copper Cable
LIGHTNING RODS

Our two brands:

"Electra," 7-16 inch, with or without silver colored strand.

"Calumet," ⅜ inch. We use 99⅞% pure soft drawn copper wire.

Fixtures and Ornaments

STATIC MACHINES

Deal direct with the maker and save the jobber's profit. Our prices are right.

"ELECTRA" LIGHTNING ROD CO.
Dept. "T"
CRESCO, IOWA

LIGHTNING RODS

We manufacture Pure Copper Wire Cable Lightning Rods, made of 28, 30 and 49 Wires, with complete outfit of trimmings.

E. A. FOY & CO., Cincinnati, Ohio.

Trade Supplied at Lowest Rates.
Send for Catalogue "B."

Bishop's Quick Working Forms

for closing end of Eave Trough in corrugations, as shown herewith.

You can close an end much quicker, neater and cheaper than in any other way. When you cut a trough, you can put an end in both parts, thus making no waste.

The frost will not burst the end out. You can close old work from a ladder.

The form is made in five sizes, ¾, 4, 4½, 5 and 6. For sale by jobbers or tinning specialty houses.

BISHOP HARDWARE COMPANY,
Dowagiac, Michigan.

STANDARD HORSE NAIL CO.
NEW BRIGHTON, PA., U.S.A.
MANUFACTURE
A Full Line of Horse Nails
Send for Catalogue, Prices & Samples.

MR. DEALER—

If you carry bolts and screws in stock, we want to play ball with you. If we can prove to you that we can draw a crowd and make "gate receipts" worth while, you should be willing. Write us

STAR EXPANSION BOLT COMPANY, 147 Cedar Street New York, N. Y.

LIGHTNING RODS

A Creditable Line for Honest Men

Dealers: There is big money in handling the

Look for this brand — Barnett SYSTEM — **Reliable by test**

PURE COPPER CABLE

LIGHTNING RODS AND FIXTURES

OVER 98% PURE COPPER. Scientifically made in every respect. Permanent durability characterizes all our fixtures and ornaments. Absolute protection positively guaranteed.

Officially indorsed by Mutual and State-wide Insurance Companies. Consult our reports.

The **QUALITY** of **BARNETT RODS** is guaranteed to the purchaser. Sold only thru dealers and reliable agents. Our rods are in demand and there is good profit in handling them.

It should be greatly to your interests to know what you can do with our line. Investigate our gency proposition for this season.

DO IT NOW! Write at once for Catalog and booklet explaining the **BARNETT SYSTEM, and prices.**

JOS. BARNETT & COMPANY
Dept. 33 RIVERSIDE, IOWA

Save The Jobber's Profit

We manufacture our copper cable, spires and ornaments, and a card to us will show you the saving. The American Steel & Wire Co. guarantee our copper 98% and we give a ten year guarantee on all our goods. Write us and save the jobber's profit.

ECLIPSE WIRE FENCE CO., Lansing, Mich.

99 87/100 PURE

That is what a sample of the copper wire tested that goes into our famous Copper Cable Lightning Rod. We want to send you a sample and quote you prices on the best goods there are on the market at a price that will surprise you. We loan you one of our improved static machines with first order for 2,000 feet. Also furnish 25 year guarantees. Write today for agency to

Maher & Son Lightning Rod Co., Preston, Iowa

SYRACUSE STEEL SINK — **Bracket**

Plain, Galvanized and Nickel

Light in Weight
Neat in Appearance
Stronger than Cast Iron.

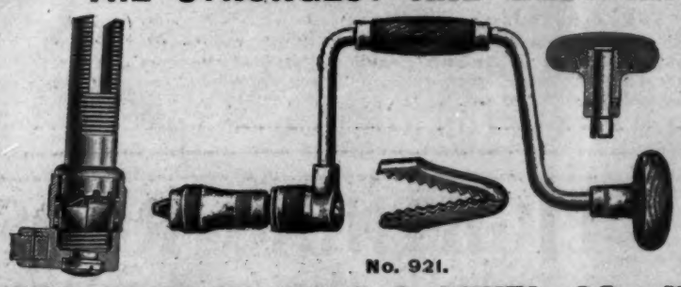
This bracket is detachable and much more easily placed than the ordinary cast bracket. Descriptive circulars and prices on application.

Manufactured by

H. E. HESSLER COMPANY, 502 N. Salina St., Syracuse, N. Y.

STANLEY CONCEALED RATCHET BRACES

THE STRONGEST AND BEST RATCHET BRACE MADE.



No. 921.

FOR DESCRIPTION OF FULL LINE OF BRACES AND OTHER HIGH GRADE CARPENTERS' TOOLS.

WRITE FOR CATALOGUE **No. 34**

THE STANLEY RULE & LEVEL CO., New Britain, Conn., U. S. A.

DISSTON

SAWS, TOOLS AND FILES

MADE SOLD USED **ON MERIT**

AND THE CONFIDENCE PLACED IN THE QUALITY AND EFFICIENCY OF THE **DISSTON BRAND** SHALL BE AS WELL-DESERVED IN THE FUTURE AS IT HAS BEEN DURING THE PAST

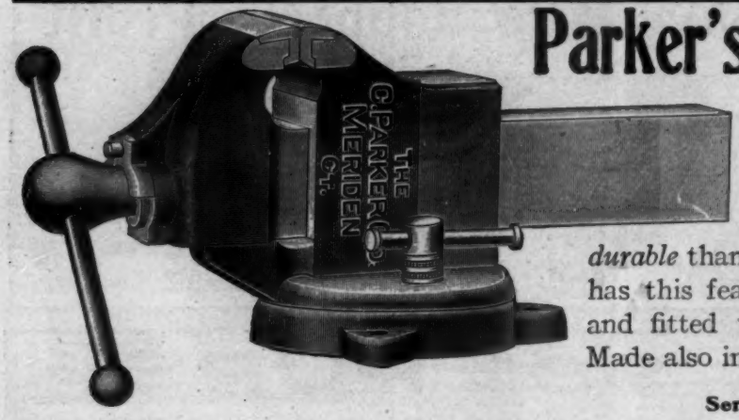
SIXTY-NINE YEARS

HENRY DISSTON & SONS, Inc.

KEYSTONE SAW, TOOL, STEEL AND FILE WORKS.

PHILADELPHIA, PA.

Parker's Reinforced Slide Solid Jaw Swivel Vise



This Vise is made of Semi-Steel for Extra Heavy Work. It has a Reinforced Sliding Jaw which makes it *much stronger* and *more durable* than other vises. No other vise made has this feature. The Steel Faces are milled and fitted to the Jaws and are Renewable. Made also in Stationary style.

Send for Special Vise Catalog No. 5

The Charles Parker, Co., Meriden, Conn. and 32 Warren St., New York

Light Gray Iron Castings

Builders' Hardware, Dampers and Damper Clips.

OIL AND GAS STOVES, FURNACE LAMPS, MOLASSES GATES, LETTER BOXES, HARDWARE SPECIALTIES.

See our Display at the Cleveland Industrial Exposition, June 7th to 19th, inclusive.

THE TAYLOR & BOGGIS FOUNDRY CO., CLEVELAND, OHIO.

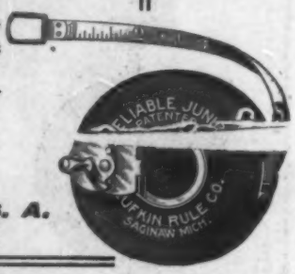
LUFKIN

Measuring Tapes

are made in every conceivable variety, to suit every purse and purpose, but all of the same superior quality.

¶ Our extensive advertising creates a demand, that every progressive dealer should be able to satisfy.

¶ It takes but a minute and a postal to ask for our catalog—it's more than worth while.



Please Mention THE AMERICAN ARTISAN

THE LUFKIN RULE CO. Saginaw, Mich., U. S. A.

New York London, Eng. Windsor, Ont.

NOTE ITS SIMPLICITY

Automatic Swivel Vise

Locks Automatically by Tightening the Jaws

Saves 20 per cent Vise Labor

SEND FOR CATALOGUE

ROCK ISLAND TOOL CO. ROCK ISLAND, ILLINOIS, U.S.A.

136 Liberty St. NEW YORK

116 Lake St. CHICAGO

DENVER, 208 McPhee Building

"Yankee Tools"

Are Without Equal in Quality or Efficiency in Practical Use

New Styles—Have You Seen Them?

MAGAZINE RATCHET SCREW DRIVER, NO. 65

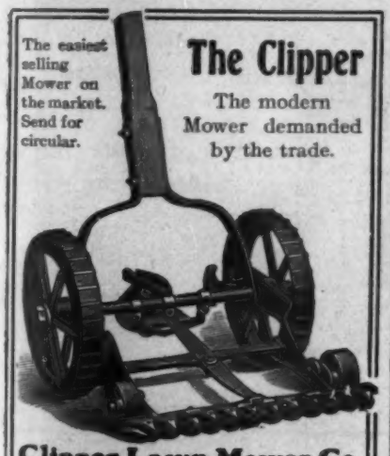
RATCHET DRIVER with SCREW HOLDER NOS. 110-111-115

RATCHET "SCREW EYE" DRIVER, NOS. 80 and 81

ASK YOUR JOBBER ABOUT THEM

Send for "Yankee" Tool Catalog.

North Bros. Mfg. Co., Philadelphia



The easiest selling Mower on the market. Send for circular.

The Clipper

The modern Mower demanded by the trade.

Clipper Lawn Mower Co.

DIXON, ILL.

Manufacturer of Hand and Pony Mowers and Marine Gasoline Engines

The Highest Grade File Made.

DELTA

TRADE MARK DELTA

DELTA FILE WORKS

CARVER FILE CO.

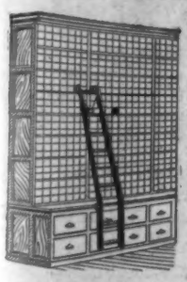
PHILADELPHIA, PA.

An independent organization not connected with the trust in any form, shape or manner.

FILES OF QUALITY

FILES

The File You Will Eventually Use.



Milbradt's Rolling Shelf Ladders

Are made to fit all kinds of high shelvings and are guaranteed to be satisfactory in every respect.

HIGHEST AWARD St. Louis World's Fair

Send for Catalog and Prices.

JOHN CALANDER

Manufacturer

629-631-633 Jackson St.

ST. PAUL, MINN.

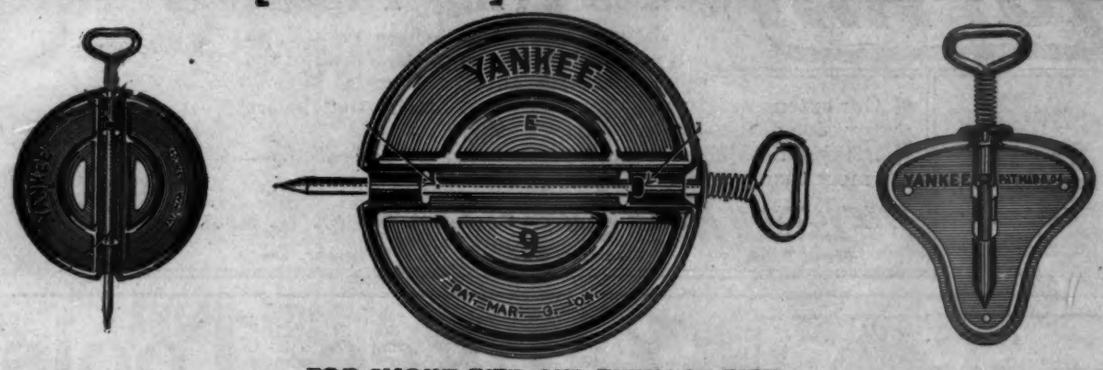
100 TINNERS' PATTERNS

Complete for $1.00

SENT POSTPAID ON RECEIPT OF PRICE.

DANIEL STERN, 355 Dearborn St., Chicago.

YANKEE [All Steel] DAMPERS and CLIPS



FOR SMOKE PIPE AND FURNACE PIPE

THE S. M. HOWES COMPANY, 40-46 Union St., BOSTON

Hardware Shelving, Shelf Boxes, Screw Cases, Etc.

SEND FOR BOOKLET

W. B. Heller & Co.
Montpelier, Ohio

Complete Stock
Carried at our Branch
220-226 Wyandotte Street
KANSAS CITY, MO.

It's all in Our dasher

The Original ALL METAL "POLAR STAR"

No Other "Just As Good" and They Can't Make 'Em Better.

Best materials procurable enter into their construction.
They are purposefully correct.
They are the most inexpensive good articles of their kind on the market.
They allow a good margin of profit to jobber and dealer.
The consumer gets his money's worth—and more.

Write for Full Descriptions and Prices.

Smith & Hemenway Co.
108-110 Duane Street, NEW YORK, N. Y.

- SHELVING -
WARREN SYSTEM
SELF PAYING
HARDWARE STORE EQUIPMENT
IN INTERCHANGEABLE SECTIONS
& SCREW, BOLT & GUN CASES.
J. D. WARREN MFG. CO. CHICAGO U.S.A.

Washing Machines
Are Staple—
They are good
Things to use
Which makes
Them good
To sell—
That is if
They are
Reliable
Machines.

The White Line
Of Washing
Machines are
Reliable—
Fully guaranteed—
Safe to buy—
And safe
To sell.
Do you
Handle
Them?

White Lily Mfg. Co.
1500 Rockingham Road, Davenport, Iowa.

INTERCHANGEABLE
LOCK-CORNER SHELF BOXES
For the Hardware Trade.
THE A. H. GREEN CO.,
97-101 Warren St., NEW YORK.

"Dime" Screen Door Check

Stops the slamming of the **Screen Door**
Sold at all Hardware Stores.
Send for circular and ask for prices.
By mail, 12 cts.

CALDWELL MFG. COMPANY
41 Jones St., Rochester, N. Y.

TO THE AMERICAN ARTISAN:

You may discontinue my L-84 and L-85 ads. I have had thirty answers in the last few days and I think I will be able to do business with some of these people. You may continue my L-77 ad. We can certainly reach the people through your advertising medium.

W. A. COVELL, Janesville, Wis.

AUTOMATIC SANITARY ICE CREAM FREEZER

The FREEZER that has made the Sweat-making, Back-breaking, Crank-Freezer Out-of-Date.

¶ There is not another Freezer like it on the market. ¶ It has no dasher, crank nor gears to get out of order and is so easy to operate that a mere child can do the freezing. ¶ Its cylinder is rust-proof and absolutely sanitary, being made of white enameled steel; inside cover of aluminum. ¶ This Freezer is made with 1, 2, 3 or 4 cylinders of 1 to 4 quarts capacity each. ¶ It will freeze cream in five minutes. ¶ Send for descriptive matter and prices.

The New England Enameling Co.

MIDDLETOWN and PORTLAND, CONN.

H. GINSBURG,

Sales Agt., 736 Broadway, New York

"THE FLYER WASHER"

Like a magnet, it draws the trade to you.

STRONG
DURABLE
EASY RUNNING
QUICK SELLING
GOOD PROFITS
MORE TRADE

Do you want the Agency?

H. F. Brammer Mfg. Co., Davenport, Iowa

The Original Fleur De Lis

PATENTED SURFACE HINGE

Dealers and Users Beware of Infringement

We Have Broad Patents Covering This and Similar Designs and Shall Protect Our Own

Made in all Finishes. They Have No Comparison for High-Class Work at Moderate Prices.

The Griffin Mfg. Co.

Home Office and Factory, 1300 Cherry St., ERIE, PENN.
Chicago Office, 85 E. Lake Street.

"SURE CUT" CAN OPENER
PATENTED 7, 19, '04

TWO CUTTERS
ONE FOR ROUND CANS
ONE FOR SQUARE CANS
Retails for 10 cents

5—Grades
CLEAVER AND TENDERER.

ICE CHISELS
Six Styles.

We manufacture a large line of Bread, Butcher, Carving and Paring Knives, Can Openers, Family Cleavers, Shoe and Putty Knives, Wall Scrapers, etc.

Write for Prices.

IRA F. WHITE & SON CO.
NEWARK, N. J.

Kitchen Knives

The BUFFALO MFG. CO.

BUFFALO, N. Y.

High Grade Standard Metalware

These Are ALL Good Sellers

Chafing Dishes
Table Kettles and Stands
Coffee Extractors
Water Filters
Nursery Chests
Crumb Trays and Scrapers
Tea and Bar Urns

Bathroom Fixtures

Wine Coolers
Water Coolers
Baking Dishes
Cool Vases and Hods
Candlesticks
Cuspidors
Match Safes
5 O'Clock Teas
Jardinieres, etc., etc.

Write for Our Illustrated Catalogue Today

A TRIAL ORDER WILL CONVINCE YOU

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18 Warren Street - - - - New York
1450 Arapahoe Street - - Denver, Colorado
40 Dearborn Street - - - - Chicago
51 Young Street - - - Toronto, Canada

The LENOX HOTEL

BUFFALO

Modern High Grade Fireproof

OUR OWN RAPID ELECTRIC CARRIAGES EXCLUSIVELY FOR PATRONS, operate continuously every few minutes from Hotel through Business District and to all Depots for principal trains.

EUROPEAN PLAN.
Rates $1.50 per day and upward.

GEORGE DUCHSCHERER, Prop.

"BLUE BOOK" CREDITS

—OF THE—

Iron, Steel, Hardware, Stoves, Tinware, Plumbing, Etc. Trades.

This Agency issues as complete and reliable a book of credit ratings for this special branch of trade as has ever been published, containing about 400,000 rated names of wholesalers, retailers and manufacturers, covering the trade thoroughly. The ratings are conservative and very reliable. **The paying record** is based upon **ledger experience** of credit men everywhere.

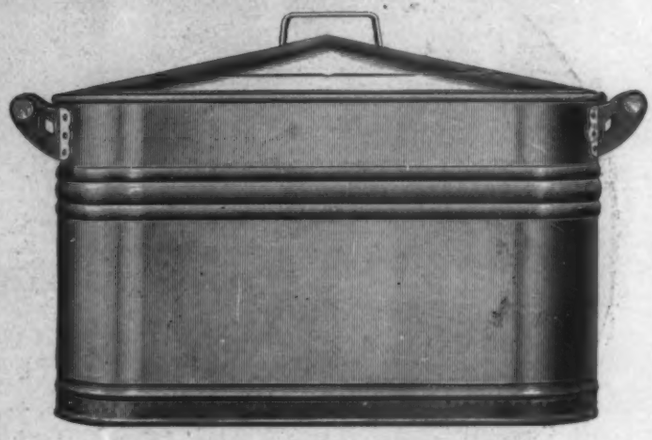
You buy credit information. Isn't it the part of a good buyer to post himself thoroughly on the merits of a book of ratings, gotten up especially for his trade by men with ample capital and who are thoroughly trained in this class of work and who make a specialty of it?

Terms of subscription can be had by addressing Executive Office.

Iron and Hardware Mercantile Agency.

157 Federal Street. BOSTON MASS.

THE ELLIOTT



WE do not claim to make all the good tinware that is made, but when you ask for quality, honest value and genuine merit, we are there with the goods.

When you see the green and white diamond label on an Elliott wash boiler you see the boiler that has had many imitators but no equal. The wash boiler that has stood the assaults of the enemy ten years and is steadily growing in favor. There is a reason. The quality and the guarantee.

We make good where others promise. Manufactured solely by

ELLIOTT PATENTED FEB. 17, 1903.

THE ELLIOTT MANUFACTURING COMPANY

Makers of Good Goods Only

WARREN, ILLINOIS

Quick!

Can't wait when cherries are ripe—must have the right machine, *quick*

Too late, then, to stock up. Better drop a line to your jobber *to-day*

Wherever cherries grow women who know, and 'most all of them do, will want

an "ENTERPRISE"

Cherry Stoner

If you have mislaid that latest red-covered catalogue of ours, write for another copy. No hardware store is fully equipped for business without it.

Also makers of the famous "Enterprise" Meat and Food Choppers; Rapid Grinding and Pulverizing Mills; Sausage Stuffers and Lard Presses; Fruit Wine and Jelly Presses; Bone, Shell and Corn Mills; Cold Handle Sad Irons, Etc.

The Enterprise Mfg. Co. of Pa., Philadelphia, U. S. A.

21 Murray Street, New York — 438 Market Street, San Francisco

The Original Fleur De Lis

PATENTED

SURFACE HINGE

Dealers and Users Beware of Infringement

We Have Broad Patents Covering This and Similar Designs and Shall Protect Our Own

Made in all Finishes. They Have No Comparison for High-Class Work at Moderate Prices.

The Griffin Mfg. Co.

Home Office and Factory, 1500 Cherry St., ERIE, PENN.
Chicago Office, 85 E. Lake Street.

"SURE CUT" CAN OPENER
PATENTED 7, 19, '04

TWO CUTTERS
ONE FOR ROUND CANS
ONE FOR SQUARE CANS
Retails for 10 cents

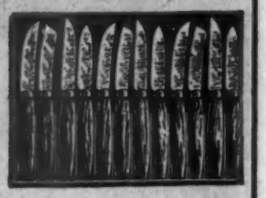
5—Grades
CLEAVER AND TENDERER.

ICE CHISELS
Six Styles.

We manufacture a large line of Bread, Butcher, Carving and Paring Knives, Can Openers, Family Cleavers, Shoe and Putty Knives, Wall Scrapers, etc.

Write for Prices.

IRA F. WHITE & SON CO.
NEWARK, N. J.



Kitchen Knives

The BUFFALO MFG. CO.

BUFFALO, N. Y.

High Grade Standard Metalware

These Are ALL Good Sellers

Chafing Dishes
Table Kettles and Stands
Coffee Extractors
Water Filters
Nursery Chests
Crumb Trays and Scrapers
Tea and Bar Urns

Bathroom Fixtures

Wine Coolers
Water Coolers
Baking Dishes
Coal Vases and Hods
Candlesticks
Cuspidors
Match Safes
5 O'Clock Teas
Jardinieres, etc., etc.

Write for Our Illustrated Catalogue Today

A TRIAL ORDER WILL CONVINCE YOU

BRANCH OFFICES

18 Warren Street - - - - New York
1430 Arapahoe Street - - - Denver, Colorado
40 Dearborn Street - - - - Chicago
51 Young Street - - - Toronto, Canada

The LENOX HOTEL

BUFFALO

Modern High Grade Fireproof

OUR OWN RAPID ELECTRIC CARRIAGES EXCLUSIVELY FOR PATRONS, operate continuously every few minutes from Hotel through Business District and to all Depots for principal trains.

EUROPEAN PLAN.
Rates $1.50 per day and upward.

GEORGE DUCHSCHERER, Prop.

"BLUE BOOK" CREDITS

—OF THE—

Iron, Steel, Hardware, Stoves, Tinware, Plumbing, Etc. Trades.

This Agency issues as complete and reliable a book of credit ratings for this special branch of trade as has ever been published, containing about 400,000 rated names of wholesalers, retailers and manufacturers, covering the trade thoroughly. The ratings are conservative and very reliable. **The paying record** is based upon **ledger experience** of credit men everywhere.

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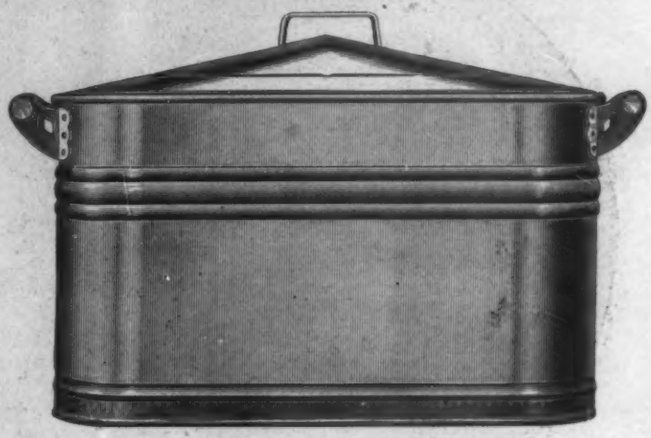
Iron and Hardware Mercantile Agency.

157 Federal Street, BOSTON MASS.

THE ELLIOTT



WE do not claim to make all the good tinware that is made, but when you ask for quality, honest value and genuine merit, we are there with the goods.

When you see the green and white diamond label on an Elliott wash boiler you see the boiler that has had many imitators but no equal. The wash boiler that has stood the assaults of the enemy ten years and is steadily growing in favor. There is a reason. The quality and the guarantee.

We make good where others promise. Manufactured solely by

ELLIOTT PATENTED FEB. 17, 1903.

THE ELLIOTT MANUFACTURING COMPANY

Makers of Good Goods Only

WARREN, ILLINOIS

Quick!

Can't wait when cherries are ripe—must have the right machine, *quick*

Too late, then, to stock up. Better drop a line to your jobber *to-day*

Wherever cherries grow women who know, and 'most all of them do, will want

an **"ENTERPRISE"**

Cherry Stoner

If you have mislaid that latest red-covered catalogue of ours, write for another copy. No hardware store is fully equipped for business without it.

Also makers of the famous "Enterprise" Meat and Food Choppers; Rapid Grinding and Pulverizing Mills; Sausage Stuffers and Lard Presses; Fruit Wine and Jelly Presses; Bone, Shell and Corn Mills; Cold Handle Sad Irons, Etc.

The Enterprise Mfg. Co. of Pa., Philadelphia, U. S. A.

21 Murray Street, New York — 438 Market Street, San Francisco

PACKED IN KEGS WITH RED HEADS

To describe the manufacture of

JUNIATA HORSE SHOES

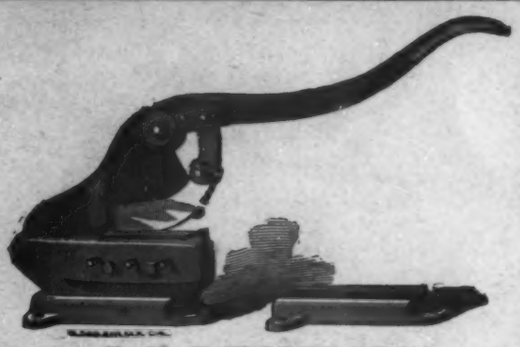
is to write the history of iron and steel making, thus showing the results of ages of experience as embodied in these good Shoes.

This experience is first brought to bear in digging the ore from the ground, and then follows through the furnaces, and the many operations of shaping, to the finished Shoe. Each process is under the keen eye and is guided by the hands of painstaking and highly-skilled men, whose lives have been spent each in his particular line of work.

The united result, up to the time we offer for sale the finished keg of shoes, is that of the highest and best that good workmen can produce.

Made of Steel or Iron, in Standard Sizes and Patterns, adapted to both city and country use.

CORNICE BRAKE



No. 59. HAND LEVER SHEARS
Will cut No. 16 Gauge material, a swath of 3¼-inch.
Weight, 20 pounds.

No. 61. HAND LEVER PUNCH
Will punch $\frac{3}{16}$-inch holes in ¼-inch iron.

The J. M. Robinson Mfg. Co.
3282 to 3288 Spring Grove Avenue
CINCINNATI, O., U.S.A.

Dealers! This Is For You!

A new book, just published, which should have a place in every store:

THE AMERICAN ARTISAN ADVERTISING MANUAL

This is a book worth many times its original cost to any dealer who advertises. In its 278 pages there are exactly 228 illustrations of advertisements that have actually been inserted by dealers all over the country in their local papers.

The advertisements are all comprehensively criticised—their weaknesses indicated—their strong features favorably commented on to the end that any dealer by applying the countless hints and suggestions to his own copy can greatly increase the effectiveness of his advertisements.

If your advertisements are not producing the desired results, consult this book for the reason. It will not only give the reason, but show you how to avoid the mistakes you have been making.

Are your ads unattractive? The subject of "display" is given space throughout the book.

Is there any question concerning your advertising upon which you would like expert opinion? THE AMERICAN ARTISAN ADVERTISING MANUAL will supply it.

It is an ever-ready reference book and no enterprising dealer should be without it.

The book is elegantly gotten up in a durable manner and is cloth bound.

The price is $3.50 per copy. For sale by your book seller
OR BY

DANIEL STERN, PUBLISHER,

355 Dearborn Street Chicago, Illinois.

Easy Take-Down

High
Power
6 Shots
Repeater

If You Don't Know

"Standard" Rifles, you ought to look into them at once. They contain many vital improvements on the rifles you already know. Ready for distribution through jobbers about July, 1st.

"STANDARD" HIGH POWER REPEATING HAMMERLESS RIFLES

Hand-Operated or Self-Operated

Higher operating speed, because of perfect action. **Hand-Operated** action is easy—doesn't disturb the aim. **Automatic** action is under perfect adjustment and control. Most perfect workmanship and materials—the finest rifles ever made.

Write Now for Advance Catalog.

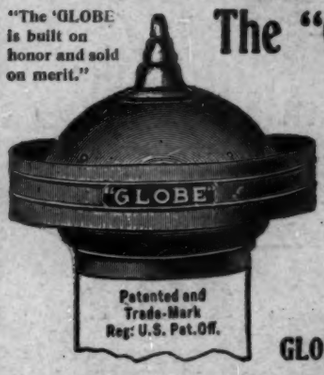
STANDARD ARMS COMPANY, 133 F Street, Wilmington, Del., U. S. A.

THE IMPROVED ONE-PIECE MITER

This miter is made absolutely correct, true to shape, size and bead, and has the easiest connecting slip joint. Will save your time and temper. In case your supply house cannot furnish them send your order direct to the

J. E. WHITACRE MFG. CO.
ROCKFORD, ILL.
Manufacturers of Sheet Metal Specialties.

"The 'GLOBE' is built on honor and sold on merit."



The "GLOBE" Ventilator

in COPPER, GALVANIZED IRON and with Glass Tops for Skylight purposes.

ABSOLUTELY STORM PROOF
For Perfectly Ventilating Schools, Churches, Halls, Mills, Factory and Audience Rooms of Every Character
SMOKY CHIMNEYS CURED
"GLOBE VENTILATED RIDGING"
Send for Pamphlet
MANUFACTURED BY
GLOBE VENTILATOR CO., Troy, N. Y.

The ECLIPSE Nested Stove Pipe Thimble

Saves 80 per cent of room.
Stronger than a hand-made riveted thimble.
Always Ready to hook together.
The Lug is always on top and passes through two slots then tied. Does not interfere with the entering stove pipe.

The ECLIPSE Nested Stove Pipe Thimble is made of Galvanized Iron in sizes of 5, 6 and 7 inch.
Manufacturers of Pieced Tinware and all Styles of Flour Sifters.
STUBER & KUCK, Peoria, Ill.

RADICAL CUTS IN PRICE MEAN RADICAL CUTS IN QUALITY

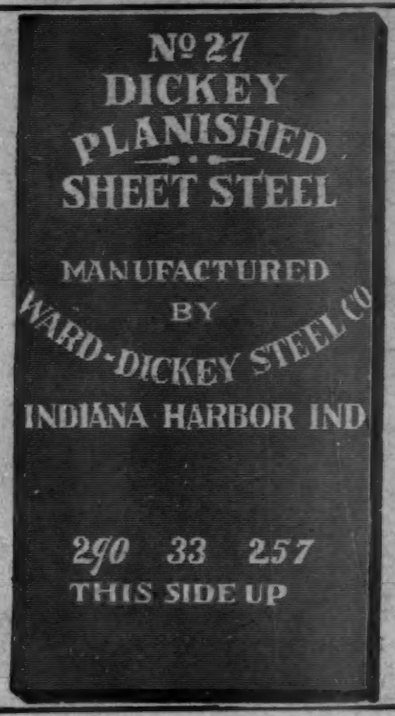
Labor costs are not lowered—Pig Tin and Lead are subject to sudden speculative changes and no manufacturer can afford to take a chance on the rise and fall of the market when the price of high grade Roofing Tin is fixed—moderate reductions in price are permissible on account of lower cost of base plate used in making ordinary tin but

SCOTT'S EXTRA COATED

is made with a base of
HAMMERED OPEN HEARTH
and the quality is as good as ever. Investigate before taking the RADICAL CUT BAIT.

TRADE MARK SCOTT'S IC EXTRA COATED REGISTERED HAMMERED OPEN HEARTH

FOLLANSBEE BROTHERS CO.
PITTSBURGH



Present Route TO South America

Twice Across the Atlantic
Double Time
Double Freight

Cannot Build Export Trade Under Such a Handicap

A FAST SELLING ITEM
and one which leaves the dealer a good profit is our

BERLIN KETTLE

Made with tin or enameled cover.
Our line consists of over 500 fast selling items.

Like all our goods it is strictly first class and sells at a reasonable price.

WRITE FOR CATALOG.
Star ★ Enameling & Stamping Co., PITTSBURGH, PA.

Drink Pure Water

The No. 50 Star Pump shown here will positively purify the water in any well or cistern in a short time.

This purifying feature alone makes it the only pump fit to put in any well where the water is used for household purposes, for it will surely save its cost in the doctor's bill many times over.

As it is made of No. 24 gauge galvanized iron it is a very substantial and handsome outfit, and will last for years.

Our line of purifying pumps is very complete. So is our line of Galvanized Chain Pump Cases and Tubing.

Ask your jobber for Star Pumps.

Star Bucket Pump Co.
ST. LOUIS, MO.

YALE
Russia finish, pat. Lock
STOVE PIPE

It is made of a very high grade of uniform color Blue Polished Steel and is coated to prevent rusting. Made in all sizes. Packed twenty-five and fifty joints to crate. For sale by the jobbing Hardware Trade throughout the United States. Mfg. by HEMP & CO. 2nd and Chouteau Ave., ST. LOUIS. In the event Your Jobber does not handle this pipe, send your inquiries to us.

The "CENTENNIAL"
RAIN - WATER - CUT - OFF

The strongest, most durable and cheapest CUT-OFF on the market.

The only single cut-off made to fit Corrugated and plain pipe and which can be used without extra pipe or elbows. For sale by all leading jobbers.

Manufactured only by
The Sullivan-Geiger Co.
19 & 21 E. South Street, Indianapolis